

**Leadership viewed through double lenses: An examination of
transformational leader behaviours and social processes of
leadership and their impact on key organisational variables within
Australian local councils[†].**

**Michael Muchiri, Central Queensland University, Rockhampton,
Australia.**

Ray W Cooksey, University of New England, Armidale, Australia.

[†]**This study was partially funded by a University of New England Research Assistantship granted to the first author. The paper is based on the PhD research findings for the first author.**

Leadership viewed through double lenses: An examination of transformational leader behaviours and social processes of leadership and their impact on key organisational variables within Australian local councils.

ABSTRACT

The study examined the combined effects of transformational leadership behaviours and social processes of leadership as predictors of key individual and organisational outcomes in Australian local councils. Data from 177 local council employees indicated significant positive effects of transformational leadership on performance outcomes, collective efficacy/outcomes expectancies and organisational commitment. Social processes of leadership predicted performance outcomes, collective efficacy/outcomes expectancies and organisational citizenship behaviours. Theoretical and managerial implications following on from this study are discussed.

Key words: Transformational leadership; social processes; organisational commitment; collective efficacy/outcomes expectancies; citizenship behaviours; ICLUST – item clustering.

INTRODUCTION

There is growing attention to the influence of organisational leadership in the workplace with many studies pointing to the key role played by leadership towards the effectiveness of organisations (Bass et al. 2003; Parry 2004; Lok & Crawford 2004; Podsakoff et al. 1996; Walumbwa et al. 2005; Yammarino et al. 2001). A review of leadership literature further suggests that a reliable indicator of leadership effectiveness is the performance of the workgroup or organisation, and therefore it is vital to explore the dynamics of the leader's relationship with subordinates (Jackson & Parry 2008; Yukl 2006).

To enhance findings from ongoing research on leadership and its impact on organisational outcomes, researchers have proposed that the most beneficial way would be to examine leadership

through multiple ‘lenses’ (Dansereau & Yammarino 1998; Yammarino et al. 2001). Therefore, there is a need for an integrative leadership theory testing in which several leadership theories are examined concurrently to understand specific direct and indirect contributions of leadership styles and behaviours to targeted organisational outcomes (Lowe & Gardner 2001; Podsakoff et al. 1996; Yukl 1999, 2006; Zaccaro & Klimoski 2001).

The current study was interested in two specific leadership perspectives. The first perspective was transformational leadership as proposed by Bass, Avolio and associates (Avolio & Bass 2002; 2004; Bass 1985; Bass et al. 1999; Walumbwa et al. 2005). The second perspective was the social processes of leadership as proposed by Parry and associates (Parry 1998, 1999, 2003, 2004, Proctor & Parry 1999). These perspectives were chosen to be representative of different ways of conceptualising leadership: leadership theorised as a change-focused process and leadership theorised as a social process. The former was theorised in a positivistic a priori fashion; the latter emerged from an interpretive grounded theory approach). It was the researchers’ belief that such a study would be fruitful considering that social processes of leadership have previously been shown to impact organisational variables in a similar pattern to transformational leadership but with differing points of focus (Jackson & Parry 2008; Parry 2002a, 2003, 2004). The investigators believed that testing these two leadership theories side by side within an Australian context would unearth more findings than would a stand-alone test of a single theory.

THEORETICAL BACKGROUND AND RESEARCH MODEL

Stand-alone individual leadership theory conceptualisations and their impact on single or multiple organisational outcomes are well documented (Avolio & Bass 2002; Hooper & Martin 2008; Lowe & Gardner 2001; Lowe et al. 1996; Parry 1998; Yukl 2006). However, the present study would examine two leadership conceptualisations in one study with an expectation it would yield a richer understanding of effective organisational leadership than is the case of studying single theories. Our study also sought to extend organisational leadership research findings within local councils and public sector context.

Work by Bass, Avolio and associates has clarified the transformational-transactional leadership theory (Avolio 1999, 2005; Avolio & Bass 1988, 2002, 2004; Avolio & Yammarino 2002; Bass 1985, 1997; Bass et al. 1999). Avolio and Bass propose that transformational leaders behave in ways which achieve superior results by emphasising one or more of four dimensions of transformational leadership. First, leadership is idealised when followers seek to identify with their leaders and emulate them. Second, leadership inspires followers with challenges and persuasion that provide meaning and understanding. Third, leadership is intellectually stimulating, expanding the followers' use of their abilities. Finally, leadership is individually considerate, providing the followers with support, mentoring, and coaching. Transformational leaders motivate their associates, colleagues, followers, clients, and even their bosses to go beyond their individual self-interests for the good of the group, organisation, or society. Avolio and Bass explain that transactional leadership occurs when the leader rewards or disciplines a follower on the basis of adequacy of the follower's performance. Furthermore, this leadership approach depends on contingent reinforcement, either positive contingent reward or the more negative or passive forms of management-by-exception (Avolio & Bass 2002, 2004).

Another recent but related conceptualisation of the leadership phenomenon is to view leadership as a social process of influence (Parry 1998, 1999, 2002a; Parry & Proctor-Thomson 2001; Yukl 2006), and a relationship between those who aspire to lead and those who choose to follow (Bolman & Deal 2003; Kouzes & Posner 2003). Parry (2004: 70-71) emphasises four aspects of the social process of leadership: optimising, resolving uncertainty, enhancing adaptability and promulgating a vision. *Optimising* refers to the effective leadership process of making the best of the situation, making the most effective or optimal use of all available and potential resources, and moving beyond mediocrity towards excellence. Optimising is conceptually likened to transformational leadership, with leaders who work on the basis of contingent reward and management-by-exception as survivors, whereas leaders who are transformers are clear examples of successful leaders. Parry (1999) identifies two social processes occurring in relation to leadership, change and following. These social processes involve *resolving the uncertainty* and *enhancing the*

adaptability of followers and the leaders in their organisations. Where there was effective leadership, the uncertainty of change of both the followers and leaders could be resolved through strategies, behaviours and activities demonstrated by the leaders. In the absence of effective leadership, both leaders and followers became consumed with uncertainty, and their knowledge, performance and morale deteriorated while inaccurate perceptions were maintained. Hence, the resolution of uncertainty due to change and turbulence may directly reduce the degree to which the change becomes threatening to individuals in the organisation (Parry 2003).

RELATING LEADERSHIP TO ORGANISATIONAL OUTCOMES

In a bid to understand how leadership influences organisational performance, researchers have often studied the relationship between leadership and other key attitudinal variables such as organisational commitment (Bycio et al. 1995), collective efficacy (Walumbwa et al. 2005), organisational efficacy (Bohn 2002a), and organisational citizenship behaviours (Podsakoff et al. 1996). Recent research findings from the social processes of leadership model conducted in business and industry and local government apparently support social processes of leadership as impacting on organisational outcomes (Parry 2003, 2004). Moreover, studies conducted in business and industry, government, military, educational institutions, and non-profit organisations, all showed that transformational leaders were more effective and satisfying as leaders than were transactional leaders, although the best leaders frequently employed a blend of transformational and transactional behaviours (Avolio & Bass 2004; Bass 1997; Jackson & Parry 2008; Lowe & Gardner 2001; Lowe et al. 1996). Transformational leadership has also been positively related to employee's satisfaction, self-reported effort, job performance, organisational commitment and organisational citizenship behaviours (Arnold et al. 2001; Avolio & Yammarino 2002; Bass 1998; Epitropaki & Martin 2005; Jung & Avolio 2000; Lok & Crawford 2004; Podsakoff et al. 1996; Walumbwa et al. 2005).

As proposed in our conceptual research model depicted in Figure 1, our goal was to investigate the potential effects of transformational leader behaviours and social processes of leadership, individually and collectively, on the employees' criterion variables (organisational commitment, efficacy, organisational citizenship behaviours, and performance outcomes). **(Insert**

Figure 1 here). Therefore we propose that *‘active individualised transformational leadership, active management-by-exception and social processes of leadership would be predictive of employees’ organisational commitment, collective efficacy beliefs and outcomes expectancy, organisational efficacy, organisational citizenship behaviours and performance outcomes.’*

METHOD

Sample

Measures of leader behaviours and job attitudes for this study were collected from 177 employees, representing a return rate of 59%. Participants were drawn from nine (9) Australian local councils and represented white collar, managerial and professional positions. Respondents also represented multiple divisions, organisational levels, and from councils of varying sizes. More specifically, the sample comprised a near equal gender spread (50.3% males, 49.7% females), mostly in non-managerial positions (63.8% non-management, 36.2% management positions), well educated (76.7% post-secondary, 23.3% primary/high school). Most of the respondents came from three divisions of Administration and Corporate Affairs (27.1%), Planning and Community Services (23.2%) and Engineering and Works (23.7%).

Procedure

Following clearance from the Human Research Ethics Committee, survey questionnaires were administered to employees at various organisational levels in nine New South Wales local government councils. With the help of Human Resource departments of the participating councils, respondents filled out the questionnaires in their work settings during normal working hours, or respondents were allowed to take the survey home to complete if they so chose. The researchers had included a prepaid self-addressed envelope, encouraging respondents to post back their surveys directly to the researchers. All participants had been assured of anonymity and their right to withdraw from participation. The surveys assessed relationships between different aspects of organisational leadership and a number of distinct organisational outcomes. Council employees from various departmental levels completed the cross sectional survey, and in the process evaluated leadership capabilities as well as helped get useful data explaining how leaders impacted organisational

performance. The study integrated instruments that both quantified leadership in terms of observable behaviours (Multifactor Leadership Questionnaire), as well as those defining leadership in terms of underlying processes and mechanisms (Social Processes for Leadership Scale). The other parts of the survey had items on organisational citizenship behaviours, organisational commitment, organisational efficacy, collective efficacy beliefs and collective outcome expectancy, satisfaction, productivity, and overall effectiveness. The six scales used for most of the major variables, that is, transformational-transactional leadership, social processes of leadership, organisational commitment, citizenship behaviours, and efficacy were well-established scales whose validity and reliability had been widely reported in previous studies (Bass & Avolio 1997; Bohn 2002b; Meyer et al. 1993; Podsakoff & MacKenzie 1997; Proctor & Parry 1999; Riggs et al. 1994; Van Dyne et al. 1994).

Approach to Data Analysis

Data analyses were conducted in two major phases. First, we investigated the factor structure and reliability of all scales using Item clustering (Revelle 1978, 1979). Then, we used hierarchical multiple regression analyses to examine the aggregate effects of the set of transformational leader behaviours and social processes of leadership on the various criterion variables (Cohen et al. 2003; Cooksey 2007).

Approach to Exploratory and Confirmatory Scale Construction. To judge the dimensionality and internal homogeneity of the scales/instruments used in this study, the ICLUST item-clustering procedure (Revelle 1978, 1979) was implemented. Recent writings on alternative approaches to scale construction (Cooksey & Soutar 2006; Zinbarg et al. 2005) have shown the merits of using ICLUST analysis, especially for a small sample size as for this study ($N = 177$). Moreover, as the research used many scales developed in the US but tested in Australia, ICLUST analysis was deemed the most appropriate procedure for scale construction. The researchers agreed with Cooksey and Soutar's argument that ICLUST analyses are "relevant in cross-cultural studies or in studies that use the same measures in different circumstances, where contextual variations in construct measurement may require different scale compositions" (2006: 81). Following on from the results of both the first-order and second-order ICLUST analyses, the scale structures, reliabilities and validities of all instruments

used in this study were found to be comparable to those from original researches that had used the prevalent factor analysis. The researchers were encouraged to emulate earlier studies that had used second-order clusters for each scale as this would help reduce the already large number of variables proposed.

Hierarchical Multiple Regression Analysis. Hierarchical multiple regression analysis (Cohen et al. 2003; Cooksey 2007) was used to determine if the successive addition of information regarding leadership styles and behaviours, social processes of leadership, organisational commitment, collective efficacy beliefs and outcome expectancy, organisational efficacy, and citizenship behaviours would improve the prediction of performance outcomes beyond that afforded by demographic characteristics. Table 1 represents a logical development of a priori order of entry of predictor sets, where we worked from more stable individual characteristics such as demographic characteristics ‘outward’ into more general and dynamic work context factors such as role aspects, work environment and culture. Working backwards, organisational citizenship behaviours, organisational efficacy, collective efficacy/expectancies, and organisational commitment would form bases for separate hierarchical multiple regression (HMR) analyses (**Insert Table 1 here**). .

Predictor Variables

Transformational and transactional leadership was measured using the 45-item Multifactor Leadership Questionnaire (MLQ, Form 5x-Short) developed by Bass and Avolio (1990). The leadership dimensions measured in this survey were: transformational leadership; transactional leadership; and, laissez-faire Leadership, which is a non leadership dimension. The factor structure for this instrument had been well established in non-Australian contexts (Avolio & Bass 2004). Using ICLUST to evaluate the internal structure of the instrument in our Australian sample, we validated two second-order clusters, *active individualised transformational leadership* and *active management-by-exception* with an overall Goodness-of-fit of .96.

The social processes of leadership were measured using the 20-item social processes of leadership scale developed by Proctor and Parry (1999). The specific social processes dimensions measured were optimising, resolving uncertainty and enhancing adaptability. The reliability of the

factor structure of this scale had also been well established (Parry 2002). However, as a check on the internal structure of the scale for our sample, ICLUST was again used. We were able to extract one second-order cluster called *social processes of leadership* with an overall Goodness-of-fit of .99.

Criterion Variables

For this study, organisational citizenship behaviours (OCBs) were measured using the 24-item organisational citizenship behaviour scale (Podsakoff et al. 1993: 14-15). The dimensions measured by the OCB scale included: Altruism, Conscientiousness, Sportsmanship, Courtesy and Civic virtue. Using ICLUST, we extracted one second-order cluster called *organisational citizenship behaviour* with an overall Goodness-of-fit of .99. Organisational commitment in this survey was measured using the organisational commitment scale (Meyer et al. 1993: 544) and measured three dimensions of Affective commitment, Continuance commitment, and Normative commitment. Following the ICLUST – item clustering analysis, we extracted two second-order clusters, called *affective / normative commitment* and *continuance commitment* with an overall Goodness-of-fit of .91. Organisational efficacy was measured using Bohn's (2002a) 22-item organisational efficacy scale. ICLUST identified one second-order cluster called *organisational efficacy* with an overall Goodness-of-fit of .99. Collective efficacy beliefs and collective outcome expectancy were operationalised in accordance with work by Riggs and colleagues. Studies by Riggs and Knight (1994) reported robust reliability and validity indices. ICLUST identified one second-order cluster called *collective efficacy beliefs and outcomes expectancy* with an overall Goodness-of-fit of .94. General satisfaction, productivity, and overall effectiveness variables were all measured using: three (3) items on general satisfaction; three (3) items on morale and productivity in the work unit, and the work unit's ability to complete tasks on time; two (2) items on number of work unit's errors and customer complaints; and, one item asked participants to rate the overall effectiveness of their work units. ICLUST identified one second-order cluster called *performance outcomes* with an overall Goodness-of-fit of .97.

RESULTS

Leadership Explanation of Performance Outcomes

Hierarchical regression analysis was employed to test for the effects of all IV sets on predicting performance outcomes. For purposes of this paper, we report only the portion of the results that were associated with the role of leadership within the hierarchy of predictive contributions. For all *F*-tests of significance, “Model II error”, where all predictor effects have been removed, was employed (see Cohen et al. 2003). The left-hand portion of Table 2 displays the leadership variable set when entered in the sequential order described in Table 1 above, the R^2 Change and its associated degrees of freedom, *F* Change (Partial *F*-test), and Sig. *F* Change (*p*-values for the Partial *F*-test). The right-hand portion of the table lists the significant individual IV contributors to predictors at that step, showing the variables analysed, the part (semi-partial) correlation, Partial *F*, and Sig. (*p*-value for the Partial *F*-test). The table also displays the overall R^2 , the adjusted R^2 after entry of all independent variable sets, and the overall model *F* and *p*-value. **(Insert Table 2 here)**. After the final step, with all IV sets in the equation described in Table 1 above, the overall regression model was significant ($R^2 = .739$; adjusted $R^2 = .704$; $F(21, 155) = 20.93, p < .001$). Thus, with all variable sets entered, nearly 74% of the variance in performance outcomes was explained. The leadership set contributed significantly to the prediction of performance outcomes over and above what the demographic set could predict (R^2 change = .512, F Change (3, 155) = 101.35, $p < .001$). Among the leadership variables, active individualised transformational leadership (part corr = .444, partial $F = 117.07, p < .001$), active management-by-exception (part corr = -.093, partial $F = 5.14, p = .002$), and social processes of leadership (part corr = .277, partial $F = 45.56, p < .001$) were all significant in the explanation of the variance in performance outcomes at this step. Those leaders perceived to score higher on the measures of active individualised transformational leadership and social processes of leadership were associated with a significant increase in performance outcomes. Those leaders perceived to score higher on active management-by-exception were associated with a significant decrease in performance outcomes.

Leadership Explanation of other Organisational Outcomes

With all variable sets entered, nearly 65% of the variance in organisational citizenship behaviours was explained. **(Insert Table 3 here)**. The leadership set contributed significantly to the prediction of organisational citizenship behaviours over and above what the demographic set could predict (R^2 change = .349, F Change (3, 156) = 52.00, $p < .001$). Among the leadership variables, only social processes of leadership (part corr = .512, partial F = 117.18, $p < .001$) was significant in the explanation of the variance in organisational citizenship behaviours at this step. Those leaders perceived to score higher on the measure of social processes of leadership were associated with a significant increase in organisational citizenship behaviours.

After the entry of all variable sets nearly 60% of the variance in organisational efficacy was explained. **(Insert Table 4 here)**. The leadership set contributed significantly to the prediction of organisational efficacy over and above what the demographic set could predict (R^2 change = .128, F Change (3, 157) = 16.62, $p < .001$). Among the leadership variables, only social processes of leadership (part corr = .231, partial F = 20.79, $p < .001$) was significant in the explanation of the variance in organisational efficacy. Those leaders perceived to score higher on the measures of social processes of leadership were associated with a significant increase in organisational efficacy.

With all variable sets entered, nearly 46% of the variance in collective efficacy/expectancies was explained. **(Insert Table 5 here)**. The leadership set contributed significantly to the prediction of collective efficacy/expectancies over and above what the demographic set could predict (R^2 change = .309, F Change (3, 158) = 30.14, $p < .001$). Among the leadership variables, active individualised transformational leadership (part corr = .203, partial F = 12.06, $p < .001$) and social processes of leadership (part corr = .357, partial F = 37.29, $p < .001$) were all significant in the explanation of the variance in collective efficacy/expectancies at this step. Those leaders perceived to score higher on the measures of active individualised transformational and social processes of leadership were associated with a significant increase in collective efficacy/expectancies.

After the entry of all variable sets, nearly 45% of the variance in affective-normative commitment was explained. **(Insert Table 6 here)**. The leadership set contributed significantly to the

prediction of the affective-normative commitment over and above what the demographic set could predict (R^2 change = .112, F Change (3, 159) = 10.75, $p < .001$). Among the leadership variables, only active individualised transformational leadership (part corr = .221, partial F = 14.07, $p < .001$) was significant in the explanation of the variance in the affective-normative commitment at this step. Those leaders perceived to score higher on the measures of active individualised transformational were associated with a significant increase in the affective-normative commitment.

After the entry of all variable sets, nearly 28% of the variance in continuance commitment was explained. **(Insert Table 7 here)**. The leadership set contributed significantly to the prediction of the continuance commitment over and above what the demographic set could predict (R^2 change = .059, F Change (3, 159) = 4.18, $p = .007$). Among the leadership variables, only active individualised transformational leadership (part corr = -.144, partial F = 4.56, $p = .004$) was significant in the explanation of the variance in continuance commitment at this step. Those leaders perceived to score higher on the measures of active individualised transformational leadership were associated with a significant decrease in continuance commitment.

CONCLUSIONS AND IMPLICATIONS

The present research was unique in that it was one of the first studies to examine at once the joint influence of two major leadership conceptualisations (i.e., transactional-transformational leadership and social processes of leadership) on a range of organisational behaviour outcomes. This approach answered the recent call for collaborative tests leadership theories are examined jointly (Hughes et al. 2006; Podsakoff et al. 1996; Yammarino et al. 2001). The research also explored and used a unique scale construction method, item-clustering (ICLUST) instead of the popular confirmatory factor analysis (whether in factor analysis or structural equation modelling) that has pervaded scale construction in leadership/management research. The results of the empirical study provided support for the proposition advanced by the conceptual research model. All of the final second-order clusters had acceptable goodness-of-fit indices and were of comparable equivalent structures to factor analysed dimensions of research variables reported in extant theory. The hierarchical multiple regression analysis indicated the significant role played by organisational

leadership, as envisaged in the two leadership conceptualisations, in the prediction of organisational commitment, collective efficacy beliefs and outcomes expectancy, organisational efficacy, organisational citizenship behaviours and performance outcomes.

In accordance with our proposition, active individualised transformational leadership, active management-by-exception and social processes of leadership were predictive of employees' organisational commitment, collective efficacy beliefs and outcomes expectancy, organisational efficacy, organisational citizenship behaviours and performance outcomes. As expected the impact of active individualised transformational leadership and social processes of leadership was positive in these relationships whereas the impact of active management-by-exception was negative. These results support the core thesis of transactional-transformational leadership theory, that active transformational (which here incorporates contingent reward) leader behaviour was positively related to performance outcomes whereas the passive dimension was negatively related to performance (Avolio et al. 1988; Bass 1985; Bass et al. 2003; Bycio et al. 1995; Waldman et al. 1987). In the present study, active management-by-exception (part of transactional leadership) was negatively related to performance outcomes. Thus, by practising aspects of transformational leadership such as articulating clear standards and expectations for performance and showing recognition to work unit members for specific task or goal achievements, work unit leaders may establish a foundation that later leads to higher performance outcomes. The findings also extend the work by Parry (2002, 2003, 2004) in that social processes of leadership were correlated with work unit outcomes (morale, effectiveness and productivity). Thus, promoting aspects of social processes of leadership like communication, enhancing adaptability and resolving uncertainties may lead to greater clarification and subsequent higher performance outcomes.

For our local council sample, only social processes of leadership (and not active individualised transformational leadership as proposed in extant US research) were predictive of citizenship behaviours and organisational efficacy. The absence of influence from active individualised transformational leadership to organisational citizenship behaviours runs contrary to findings from a study in the US (Podsakoff et al. 1996) where transformational leadership predicted

organisational citizenship behaviours. However, it could be speculated that organisational citizenship behaviours, at least in the context of Australian local councils, is a function of social processes facilitated by the leader, rather than a function of the leader behaviours themselves. The findings that social processes of leadership were predictive of both organisational citizenship behaviours and efficacy also lends credence to the fact that the social processes of leadership, originally conceptualised in an Australian and New Zealand context, were able to capture cultural aspects specific to organisational citizenship behaviours and organisational efficacy that the MLQ could not.

There are a number of theoretical and managerial implications. First, the study reinforced the importance of combining the transformational leader behaviours and social processes of leadership in the same investigation if one wished to obtain a comprehensive understanding of the antecedents of the employee criterion variables examined in this study. Second, the present study extended Parry and colleagues' work (Parry 2003, 2004; Parry & Meindl 2002; Parry & Proctor-Thomson 2001), especially with respect to the proposition that social processes of leadership are somewhat related to transformational leadership in regard to their potential impact on criterion variables. The findings that active individualised transformational leadership (part of transformational leadership in this study) and social processes of leadership both predicted performance outcomes and collective efficacy/expectancies confirmed that each was able to uniquely predict outcomes over and above what the other predicted. In essence, both variables were getting at different drivers of performance outcomes. If the relationship between the two constructs had been *too close*, then the inclusion of one would leave little for the other to uniquely contribute, which was not the case here. In the current study, active individualised transformational leadership and social processes of leadership did different predictive work. One important lesson for managers would be that leadership effectiveness can be enhanced if leaders emphasise both the change-oriented behaviours ('motivating' and 'visioning') as well as social relationship-building behaviours ('working with').

On research methodology, the study successfully used ICLUST analysis and hierarchical multiple regression analysis as alternative approaches to confirmatory factor analysis. Therefore, researchers in the management discipline can successfully circumvent a failure to fit models to

research data using confirmatory factor analysis and structural equation modelling. The method is especially suitable for small sample sizes like that used for this research and for scale construction which is careful to maintain cross cultural (using US scales in an Australian context) and cross organisational (using scales developed for private sector to public sector) equivalences. Practically, the findings of the current study could be used to design appropriate transformational leadership and social processes of leadership training programmes for local council leaders. Through understanding how transformational leaders or leaders facilitating social processes motivate their followers, managers may enhance those attributes associated with leadership effectiveness and thus increase performance outcomes among followers.

The study had a few limitations. First, there was a relatively low response rate in the local councils' samples. It was not easily established whether those who responded were different in any way from those who did not. The low response rate may have been due to the length of the survey and the fact that there were no obvious benefits for participants themselves. Another limitation is the reduced capacity to draw causal inferences inherent in the survey design. The data for testing the conceptual model were obtained on a single occasion from a single source. Finally, the research studied members of only one level of local government, namely local councils/shires in regional New South Wales. It is important that the findings from the present study are replicated in other industries, occupations and contexts. This would help to tease out whether or not there are local contextual constraints that influence how leadership affects organisational outcomes. Future research should examine the assertion by Parry (2004) regarding transformational leadership and the social processes of leadership measuring the same underlying construct through a more focused exploration of the two theories.

REFERENCE

- Arnold, KA, J Barling & EK Kelloway (2001) Transformational leadership or the iron cage: which predicts trust, commitment and team efficacy? *Leadership & Organization Development Journal*, 22(7), 315-320.
- Avolio, BJ (1999) *Full leadership development: building the vital forces in organizations*, Sage Publications, Thousand Oaks, Calif.
- Avolio, BJ (2005) *Leadership development in balance: made/born*. Lawrence Erlbaum Associates, Mahwah, NJ.
- Avolio, BJ & BM Bass (1988) Transformational leadership, charisma, and beyond, in: JG Hunt, BR Baliga, HP Dachler & CA Schriesheim (eds), *Emerging leadership vistas*, Lexington Books, Lexington, MA.
- Avolio, BJ & BM Bass (2002) *Developing potential across a full range of leadership : cases on transactional and transformational leadership*, Lawrence Erlbaum Associates, Mahwah, NJ.
- Avolio, BJ & BM Bass (2004) *Multifactor Leadership Questionnaire. Manual and Sampler Set* (3rd ed.), Mind Garden, Inc., Redwood City.
- Avolio, BJ, DAWaldman & WO Einstein (1988) Transformational leadership in a management game simulation, *Group & Organizational Studies*, 13, 59-80.
- Avolio, BJ & FJ Yammarino (2002) *Transformational and charismatic leadership : the road ahead* (1st ed.), Boston: JAI, Amsterdam.
- Bass, BM (1985) *Leadership and performance beyond expectations*, Free Press, New York.
- Bass, BM (1997) Does the transactional-transformational leadership paradigm transcend organisational and national boundaries? *American Psychologist*, 52, 130-139.
- Bass, BM (1998) *Transformational leadership: industrial, military, and educational impact*. Lawrence Erlbaum Associates, Mahwah, NJ.
- Bass, BM & BJ Avolio (1990). *Multifactor Leadership Questionnaire*. Consulting Psychologists Press, Palo Alto, CA.
- Bass, BM & BJ Avolio (1997). *Full range Leadership Development: manual for the Multifactor Leadership Questionnaire*. Mind Garden®, Inc, Redwood City.
- Bass, BM, BJ Avolio & DI Jung (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire, *Journal of Occupational and Organizational Psychology*, 72(4), 441.
- Bass, BM, BJ Avolio, DI Jung & Y Berson (2003) Predicting unit performance by assessing transformational and transactional leadership, *Journal of Applied Psychology*, 88(2), 207-218.
- Bohn, JG (2002a) *The design and development of an instrument to measure organizational efficacy*, Paper presented at the AHRD, Hawaii, US.
- Bohn, JG (2002b) The Relationship of perceived leadership behaviors to organizational efficacy, *Journal of Leadership and Organizational Studies*, 9(2), 65-79.
- Bolman, LG & TE Deal (2003) *Reframing Leadership*, Jossey-Bass, John Wiley & Sons Inc, San Francisco, CA.
- Bycio, P, JS Allen & RD Hackett (1995) Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership, *Journal of Applied Psychology*, 80(4), 468-478.
- Cohen, J, P Cohen, SG West & SL Aiken (2003) *Applied multiple regression/correlation analysis for the behavioural sciences* (3rd ed.), Lawrence Erlbaum Associates, Mahwah, NJ.
- Cooksey, RW (2007) *Illustrating statistical procedures: for business, behavioural and social science research*, Tilde University Press, Prahan, Victoria.
- Cooksey, RW & GN Soutar (2006) Coefficient beta and hierarchical item clustering: an analytical procedure for establishing and displaying the dimensionality and homogeneity of summated scales, *Organisational Research Methods*, 9(1), 78-98.
- Dansereau, F & FJ Yammarino (1998) A multiple-level mosaic: one way to put the pieces together, in: F Dansereau & FJ Yammarino (eds.), *Leadership: The Multiple-Level Approaches*. JAI Press Inc., London, England.
- Epitropaki, O & R Martin (2005) The moderating role of individual differences in relation between transformational/transactional leadership perceptions and organizational identification, *Leadership Quarterly*, 16, 569-589.

- Hooper, DT & R Martin (2008) Beyond personal leader-member exchange (LMX) quality: the effects of perceived LMX variability on employee reactions, *Leadership Quarterly*, 19, 20-30.
- Hughes, RL, RC Ginnett & GJ Curphy (2006). *Leadership: enhancing the lessons of experience* (5th ed.), McGraw-Hill/Irwin, New York.
- Jackson, B & KW Parry (2008) *A very short, fairly interesting and reasonably cheap book about studying leadership*, Sage, London.
- Jung, DI & BJ Avolio (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 Behaviour*, 21, 949-964.
- Kouzes, JM & BZ Posner (2003) The five practices of exemplary leadership, in: *Business Leadership: A Jossey-Bass Reader*, Jossey-Bass, John Wiley & Sons Inc., San Francisco, CA.
- Lok, P & J Crawford (2004) The effect of organisational culture and leadership style on job satisfaction and organisational commitment: a cross-national comparison, *Journal of Management Development*, 23(4), 321-338.
- Lowe, KB & WL Gardner (2001) Ten Years of the Leadership Quarterly: contributions and challenges for the future, *Leadership Quarterly*, 11(4), 459-514.
- Lowe, KB, KG Kroeck & N Sivasubramaniam (1996) Effectiveness correlates of transformational and transactional leadership: a meta-analytic review of the MLQ literature, *Leadership Quarterly*, 7, 385-425.
- Meyer, JP, NJ Allen & CA Smith (1993) Commitment to organizations and occupations: extension and test of a three-component conceptualization, *Journal of Applied Psychology*, 78, 538-551.
- Parry, KW (1998) Grounded theory and social processes: a new direction for leadership research, *Leadership Quarterly*, 9(1), 85-105.
- Parry, KW (1999) Enhancing adaptability: leadership strategies to accommodate change in local government settings, *Journal of Organisational Change Management*, 12(2), 134-156.
- Parry, KW (2002a) Four phenomenologically-determined social processes of organizational leadership: further support for the construction of transformational leadership, in: BJ Avolio & FJ Yammarino (eds.), *Transformational and charismatic leadership: monographs in leadership and management* (Vol. 2, pp. 339-372), JAI Press/Elsevier Science, Oxford, UK.
- Parry, KW (2002b) Hierarchy of abstraction modelling (H.A.M) and the psychometric validation of grounded theory research, *International Journal of Organisational Behaviour*, 5(5), 180-194.
- Parry, KW (2003) An exploration of social processes of leadership in organisations in New Zealand, Best paper in the *Journal of Australian and New Zealand Academy of Management*.
- Parry, KW (2004) Comparative modelling of the social processes of leadership in work units, *Journal of Australian and New Zealand Academy of Management*, 10(2), 69-80.
- Parry, KW & JR Meindl (2002) Models, methods, and triangulation: researching the social processes in our societies, in: KW Parry & JR Meindl (eds.), *Grounding leadership theory and research: issues, perspectives, and methods*, Information Age Publishing, Greenwich, Connecticut.
- Parry, KW & SB Proctor-Thomson (2001) *The social processes of leadership (SPL): from qualitative to quantitative analyses*, Paper presented at the Australian and New Zealand Academy of Management Annual conference, Auckland, New Zealand, 5-8 December.
- Podsakoff, PM, & SB MacKenzie (1997) The impact of organisational citizenship behaviour on organisational performance: a review and suggestions for future research, *Human Performance*, 10, 133-151.
- Podsakoff, PM, SB MacKenzie, & WH Bommer (1996) Transformational leader behaviours and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organisational citizenship behaviours, *Journal of Management*, 22, 259-298.
- Podsakoff, PM, SB MacKenzie & R Fetter (1993) Substitutes for leadership and the management of professionals, *Leadership Quarterly*, 4, 1-44.
- Proctor, SB & KW Parry (1999) *Social Processes of Leadership (SPL) Scale: the development of an instrument to identify the presence of social processes in organisations. Monograph of the Centre for the Study of Leadership*, Victoria University, Wellington.
- Revelle, W (1978) ICLUST: a cluster analytic approach for exploratory and confirmatory scale construction, *Behavior Research Methods & Instrumentation*, 10, 739-742

- Revelle, W (1979) Hierarchical cluster analysis and the internal structure of tests, *Multivariate Behavioral Research*, 14, 57-74.
- Riggs, ML, & PA Knight (1994) The impact of perceived group success-failure on motivational beliefs and attitudes: a causal model, *Journal of Applied Psychology*, 79(5), 755-766.
- Riggs, ML, J Warka, B Babasa, R Betancourt & S Hooker (1994) Development and validation of self-efficacy and outcome expectancy scales for job-related applications, *Educational and Psychological Measurement*, 54(3), 793-802.
- Van Dyne, L, JW Graham, & RM Dienesch (1994) Organizational citizenship behavior: construct redefinition, measurement, and validation, *Academy of Management Journal*, 37, 765-802.
- Waldman, DA, BM Bass, & WO Einstein (1987) Leadership and outcomes of performance appraisal processes, *Journal of Occupational Psychology*, 60, 177-186.
- Walumbwa, FO, JJ Lawler, BJ Avolio, P Wang, & K Shi (2005) Transformational leadership and work-related attitudes: the moderating effects of collective and self-efficacy across cultures, *Journal of Leadership and Organizational Studies*, 11(3), 2-16.
- Yammarino, FJ, F Dansereau & CJ Kennedy (2001) A Multiple-Level Multidimensional Approach to Leadership: viewing leadership through an elephant's eye', *Organisational Dynamics*, 29(3), 149-163.
- Yukl, GA (1999) An evaluation of conceptual weaknesses in transformational and charismatic leadership theories, *Leadership Quarterly*, 10 (2), 285-305.
- Yukl, GA (2006) *Leadership in organizations* (6th ed.), Prentice Hall, Upper saddle River, New Jersey.
- Zaccaro, SJ & R J Klimoski (2001) The Nature of Organisational Leadership. An Introduction. In Zaccaro SJ & R J Klimoski (eds), *Nature of Organisational Leadership. Understanding the Performance Imperatives Confronting Today's Leaders*, Jossey-Bass, San Francisco.
- Zinbarg, R, W Revelle, I Yovel, & W Li (2005) Cronbach's α , Revelle's β and McDonald's ω : Their relations with each other and two alternative conceptualizations of reliability. *Psychometrika*, 70(1), 123-133.

FIGURES AND TABLES

Figure 1 Proposed theoretical framework on the relationships between organisational leadership, mediators and organisational outcomes.

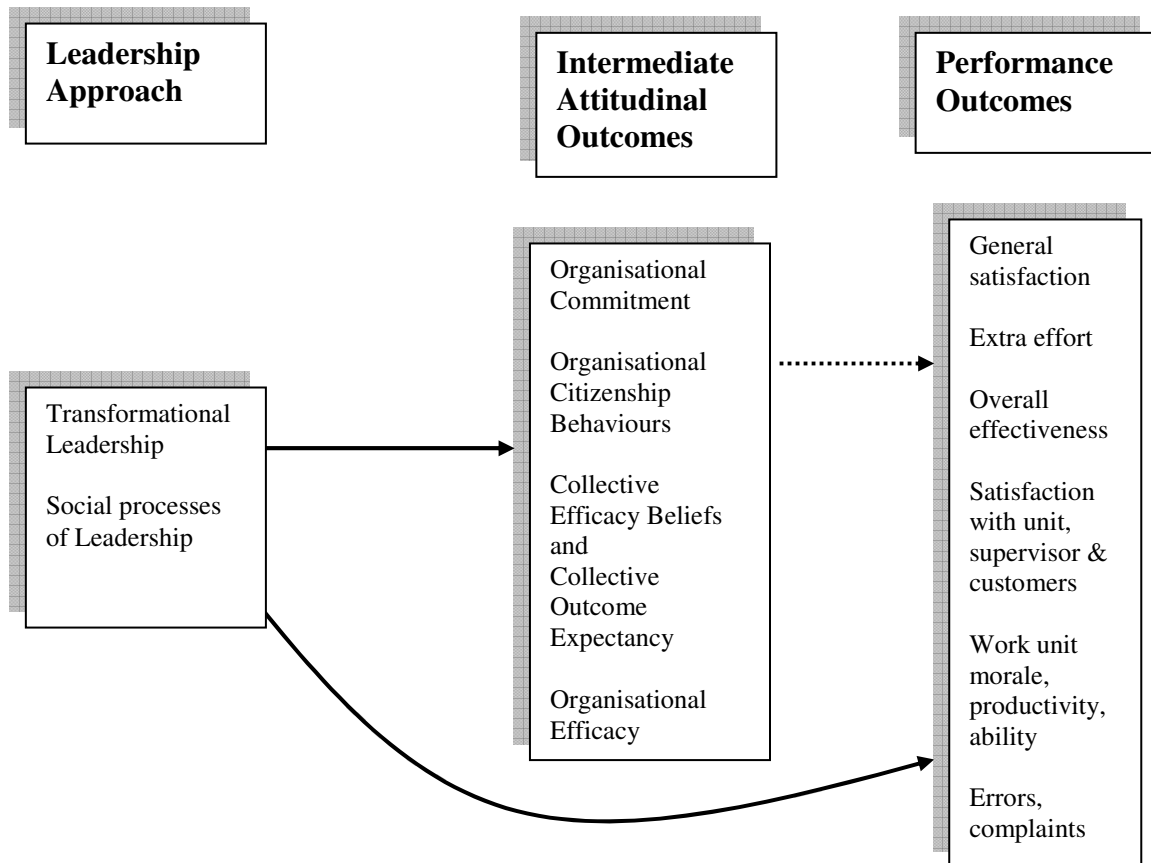


Table 1 Pattern of hierarchical regression model tests of the research framework presented in Figure 1

		Hierarchical Regression Model Predicting					
Step	Independent Variable Set	Performance Outcomes	Organisational Citizenship Behaviours	Organisational Efficacy	Collective Efficacy/ Expectancies	Affective - Normative Commitment	Continuance Commitment
1	Demographics	✓	✓	✓	✓	✓	✓
2	Leadership	✓	✓	✓	✓	✓	✓
3	Organisational Commitment	✓	✓	✓	✓	DV/ ^b IV	DV/ ^b IV
4	Collective Efficacy/ Expectancies	✓	✓	✓	DV	DV/ ^b IV	
5	Organisational Efficacy	✓	✓	DV			
6	Organisational Citizenship Behaviours	✓	DV				
7	Performance Outcomes	DV					

^a DV = dependent variable for a specific analysis

a ✓ indicates an IV set used in the analysis

^b DV/IV indicates that the two aspects of Organisational Commitment (Affective/Normative and Continuance) each served as a dependent variable while the other served as an independent variable.

Table 2 Effects of leadership on performance outcomes

VARIABLE SET	R ² Change	df	F Change	Sig. F Change	Variable	Part Corr	partial F ^a	Sig.
Leadership	.512	3	101.35	<.001*	Active individualised transformational leadership	.444	117.07	<.001*
					Active management by exception	-.093	5.14	.002*
					Social processes of leadership	.277	45.56	<.001*
Overall Model	R ² = .739; adjusted R ² =.704; F (21, 155) = 20.93, <.001* * ≤ .05 considered significant ^m .05 < p ≤ .10 considered marginally significant ^a Partial F for F Change and Part Corr calculated using Model II Error with error df = 155.							

Table 3 Effects of leadership on organisational citizenship behaviours

VARIABLE SET	R ² Change	df	F Change	Sig. F Change	Variable	Part Corr	Partial F ^a	Sig.
Leadership	.349	3	52.00	<.001*	Social processes of leadership	.512	117.18	<.001*
Overall Model	R ² = .651; adjusted R ² = .606; F (20, 156) = 14.54, <.001* * ≤ .05 considered significant ^m .05 < p ≤ .10 considered marginally significant ^a Partial F for F Change and Part Corr calculated using Model II Error with error df = 156.							

Table 4 Effects of leadership on organisational efficacy

VARIABLE SET	R ² Change	df	F Change	Sig. F Change	Variable	Part Corr	Partial F ^a	Sig.
Leadership	.128	3	16.62	<.001*	Social processes of leadership	.231	20.79	<.001*
Overall Model	R ² = .597; adjusted R ² = .548; F (19, 157) = 12.23, <.001* * ≤ .05 considered significant ^m .05 < p ≤ .10 considered marginally significant ^a Partial F for F Change and Part Corr calculated using Model II Error with error df = 157.							

Table 5 Effects of leadership on collective efficacy/expectancies

VARIABLE SET	R ² Change	D f	F Change	Sig. F Change	Variable	Part Corr	Partial F ^a	Sig.
Leadership	.309	3	30.14	<.001*	Active individualised transformational leadership	.203	12.06	<.001*
					Social processes of leadership	.357	37.29	<.001*
Overall Model								
R ² = .460; adjusted R ² =.398; F (18, 158) = 7.47, <.001* * ≤ .05 considered significant ^m .05 < p ≤ .10 considered marginally significant ^a Partial F for F Change and Part Corr calculated using Model II Error with error df = 158.								

Table 6 Effects of leadership on affective-normative commitment

VARIABLE SET	R ² Change	df	F Change	Sig. F Change	Variable	Part Corr	Partial F ^a	Sig.
Leadership	.112	3	10.75	<.001*	Active individualised transformational leadership	.221	14.07	<.001*
Overall Model	R ² = .448; adjusted R ² = .388; F (17, 159) = 7.58, <.001* * ≤ .05 considered significant ^m .05 < p ≤ .10 considered marginally significant ^a Partial F for F Change and Part Corr calculated using Model II Error with error df = 159.							

Table 7 Effects of leadership on continuance commitment

VARIABLE SET	R ² Change	df	F Change	Sig. F Change	Variable	Part Corr	Partial F ^a	Sig.
Leadership	.057	3	4.18	.007*	Active individualised transformational leadership	-.144	4.56	.004*
Overall Model	R ² = .277; adjusted R ² = .200; F (17, 159) = 3.59, <.001* * ≤ .05 considered significant ^m .05 < p ≤ .10 considered marginally significant ^a Partial F for F Change and Part Corr calculated using Model II Error with error df = 159.							