

The Effect of Organisational Performance on Employee Engagement

Peter H. Langford (peter.langford@voiceproject.com.au)

Voice Project, Department of Psychology
Macquarie University, Sydney NSW 2109 Australia

S. Demirian (s_demirian@hotmail.com)

Department of Psychology
Macquarie University, Sydney NSW 2109 Australia

Abstract

Although there have been many studies examining the link between job satisfaction and performance, previous research has focused on survey and correlational methods. This study investigated the causal relationship between employee engagement and organisational performance using an experimental design. Hypothetical vignettes were created describing organisations and were manipulated so that readers perceived the organisation as either performing above or below average. In the second task, the same organisation performed better or worse than previously described. After reading each vignette, participants were required to rate the workplace climate and expected levels of engagement. Data were collected from 108 participants. Analyses revealed that the perception of an organisation's performance and the direction of change in the performance altered reported engagement levels. Higher organisational performance resulted in higher employee engagement. Results also indicated that a positive change in organisational performance produced higher employee engagement compared to an organisation that worsened in performance even when the final performance level was the same in both conditions.

Performance-Engagement Link

Although this study will use the broader term of employee engagement (defined here as the aggregate of organisational commitment, job satisfaction and intention to stay), most previous studies have been based on job satisfaction and performance at the individual or task level.

There have been several key meta-analyses conducted on the link between performance and job satisfaction. Before the recent meta-analysis by Judge, Thoresen, Bono and Patton (2001), most articles examining the link between satisfaction and performance had cited results from Iaffaldano and Muchinsky's (1985) meta-analytic study. These authors estimated the true population correlation between satisfaction and performance to be only .17 and went on to describe the relationship as an 'illusory correlation'. Subsequent reviews have found measurement problems and flaws in Iaffaldano and Muchinsky's methodology (Organ & Ryan, 1995). In their meta-analysis of 312

samples, Judge et al. (2001) found the estimated population value of the correlation between overall job satisfaction and overall job performance to be .30 when the correlations were corrected for unreliability in satisfaction and performance measures.

Two causal assumptions have dominated the research. The most persistent theory dates back to the human relations movement and states that employee satisfaction will directly affect the quality and quantity of individual and group performance (for example, the Sears employee-customer-profit chain; Rucci, Kirn & Quinn, 1998). Despite the common view of satisfaction influencing performance, researchers have found little evidence for this assumption (Judge et al., 2001; Lawler & Porter, 1967; Locke, 1970; Lucas, 1999).

The second theoretical approach sees satisfaction as dependent on performance. The performance-causes-satisfaction theory is attributed in the literature to Porter and Lawler (1967) because they developed it most fully and hence is often referred to as the Porter-Lawler model. This model suggests that the causal relationship is moderated and satisfaction would be much weaker if rewards were not linked to performance. Using a structural equation model, Langford, Parkes and Metcalf (2006) found evidence for employees' level of engagement being a consequence of purpose, their participation and degree to which they see the organisation making progress towards important outcomes.

Bagozzi (1980) added two more models to this list. First, the two variables could be related reciprocally. This model has no distinct theoretical foundation but rather is a hybrid model of the previous two models (Judge et al., 2001). Siegel and Bowen (1971) investigated this model but only found support for job performance leading to satisfaction and not the reverse. MacKenzie, Podsakoff and Ahearne (1994) developed and tested a theoretical model that specified the relationships between in- and extra-role performance and salesperson job satisfaction, organisational commitment, role perceptions and turnover using cross sectional data from a large sample. They found that in- and extra-role performances were intertwined, with in-

role performance serving as an antecedent to job satisfaction and organisational commitment and extra-role performance as a consequence of the two variables.

Finally, Bagozzi (1980) highlighted the logical possibility that satisfaction and performance are not causally related at all and any empirical association might be a spurious one due to common antecedents. Researchers have suggested role ambiguity and self esteem as factors that might explain the association between satisfaction and performance (Judge et al., 2001). However, Bagozzi (1980) did not find support for this model even after controlling for self-esteem, job-related tension and role ambiguity. There was a positive relationship between the two constructs that could not be removed using control variables.

Organisational Performance

Previous research has predominately looked at the relationship between job satisfaction, job attitudes and performance for individuals, but little work has investigated the relationships at the organisational level of analysis (Ostroff, 1992). Early theorists, such as Locke (1970) implied that employee satisfaction and well-being are related to performance, but they did not explicitly hypothesise about the appropriate level of analysis to which their theory applied.

Ostroff (1992) argued that it may be too restrictive to examine the satisfaction-performance relationship at the individual level because doing so fails to take into account a wide range of behaviours individuals may act out in response to satisfaction. Ostroff found significant correlations between average teacher job satisfaction and numerous indicators of school effectiveness; uncorrected correlations between satisfaction and organisational performance ranged from .11 to .54, with an average of .28; and between commitment and performance, the correlations ranged from .05 to .60 with a mean of .22. Ostroff and Schmitt (1993) have also revealed reliable relations between job satisfaction and performance at the organisational level. Harter, Schmidt and Keyes' (2003) meta-analytic correlation of business-unit employee engagement with composite performance was .26 within companies and .33 for business units between companies.

Hypotheses

Previous research investigating the performance-engagement link has been based almost entirely on correlations and cross-sectional studies. The aim of the present study was to examine experimentally the impact of organisational performance on employee engagement. While not previously examined, the current study also investigated the impact upon engagement of improving and worsening organisational

performance. Specifically, the following hypotheses were made:

Hypothesis 1: Perceived higher organisational performance will lead to higher employee engagement. Perceived lower organisational performance will lead to lower employee engagement.

Hypothesis 2: An improvement in organisational performance will lead to higher employee engagement. A worsening in organisational performance will lead to lower employee engagement.

Hypothesis 3: An improvement in organisational performance will lead to higher employee engagement compared to a worsening in organisational performance, even if the final level of performance is the same.

Method

Participants

The sample in this study consisted of 108 participants. The overall mean age of the sample was 21.74 years ($SD = 5.91$, with a range from 17 to 42 years); 67% were female and 33% were male. Of the 108 participants in this study 40% had previously worked full-time (Mean work experience = 17.88 months, with a range of 1 to 250 months) and 94% had previously worked as a casual or part-time employee ($M = 35.18$ months with a range of 1 to 130 months). At the time of the study, 14% of all participants were employed in a full-time job, 23% were working part-time, 49% were employed in a casual job and 14% were not currently working.

Materials and Measures

Vignettes To test the hypotheses, this study manipulated the perceived performance of an organisation using factorial surveys, more commonly known as vignettes. Factorial surveys are constructed scenarios that attempt to capture the complexity of real life and the conditions of real human choices and judgments and attempt to show the separate influences of the factors that go into such judgments and choices (Hennessy, Macqueen & Seals, 1995; Rossi & Nock, 1982). Each vignette provides a separate condition in the experiment (Hennessy et al., 1995). The first step in designing the factorial survey is determining the dimensions or essential characteristics of the concept (Hennessy et al., 1995). The next step is to use a set of descriptive phrases that convey the meaning of each dimension.

The study was divided into two parts. At Time 1 a vignette was created giving a brief outline of a job as an organisational psychologist. Factors related to job design, organisational structure and communication and supervisory behaviours have consistently been found to

correlate with engagement (Brown & Peterson, 1993; Langford et al., 2006), so to give the sense of a real-world organisation and for the experiment to work successfully the vignettes also included such variables. Hence, the second paragraph in the vignette gave a description of the general workplace environment such as facilities, safety, rewards, role clarity, co-workers and work/life balance. While not manipulated across vignettes, these factors were included to 1) build a realistic picture of a workplace, 2) hide the purpose of the study by including details not manipulated across participants, and 3) provide control variables to enable comparison of effects across manipulated and non-manipulated factors.

These non-manipulated factors were described as being 'average' in all vignettes; for example, 'The managers in your organisation are reasonable and you get along well with your co-workers' and 'Benefits and rewards given are satisfactory'. The final section of the vignette described the organisation as either performing above average or below average in regards to overall organisational performance with statements such as 'Your organisation offers good quality services and products and clients are satisfied with the services provided' and 'Change is handled well in your company and profits are high' for a high performing organisation and 'Your organisation offers fairly average quality services and clients are somewhat satisfied with the services provided' and 'Change is not handled well in your company and profits are low' for the low performing organisation.

The vignettes at Time 2 did not include the first paragraph of the general job outline as did the Task at Time 1. Instead it described the workplace as 'twelve months later' and consisted of exactly the same average workplace environment. However, at Time 2 the organisation previously described was now performing better or worse than before. To measure the change in employee engagement the wording of the vignettes had to be sufficiently different to give the correct manipulation. The high-improving performance organisation described an improvement in performance such as 'Your organisation now offers very high quality services and clients are extremely satisfied with the services provided' and 'Change is handled very well in your company and profits are at an all time high'. The low-worsening performance organisation for example stated, 'Your organisation now offers poor quality services and clients are rarely satisfied with the services provided' and 'Change is handled poorly in your company and profits are very low'. To test hypothesis 3, the high-worsening performance organisation and the low-improving organisation were given exactly the same 'moderate' description of an organisation in Time 2- 'Your organisation now offers average quality services and clients are moderately satisfied with the

services provided' and 'Change is handled adequately in your company and profits are average'.

Employee Engagement The dependent variable of employee engagement was measured on a 10-item questionnaire taken as a subscale from the Voice Climate Survey (Langford, 2007). It consisted of three items on job satisfaction, four items on organisational commitment and three on intention to stay; the items are aggregated into these three lower order scales which in turn are aggregated into a single score for employee engagement. It included statements such as, 'Overall, I am satisfied with my job' (job satisfaction), 'I am willing to put in extra effort for this organisation' (organisational commitment) and 'I can see a future for me in this organisation' (intention to stay). Participants rated items on a 5-point Likert scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). The overall alpha for the engagement scale in Langford's (2007) study was .92 and for the current study, the overall alpha was found to be .90.

Procedure

Participants were randomly assigned to four groups; these were high-improving performance organisations (HI), high-worsening (HW), low-improving (LI) and low-worsening (LW) performance organisations. At Time 1 both the high-improving and high-worsening groups were given the same vignette of a high performing organisation. Likewise, at Time 1 both the low-improving and low-worsening groups were given the same vignette of a low performing organisation.

At Time 2, the high-improving group was given a vignette describing a very high performing organisation. Both the high-worsening and low-improving groups were given exactly the same vignette at Time 2 of a moderately performing organisation. Finally, the low-worsening group at Time 2 was given a vignette describing a very low performing organisation.

The study took approximately 20 minutes to complete.

Results

A t-test was used to analyse hypothesis 1 at Time 1. The high-improving and high-worsening groups' engagement scores were combined at Time 1 (both these groups viewed the same vignette of a high performing organisation at Time 1) to give an average score for a high performing organisation. Similarly, the low-improving and low-worsening groups' were averaged at Time 1 (both these groups viewed the same vignette of a low performing organisation at Time 1). As shown in Figure 1, employee engagement was significantly higher for the high performing organisation compared to the low performing

organisation, $t(106) = 5.54, p < .01$ with means of 3.57 ($SD = .58$) and 2.92 ($SD = .64$) respectively.

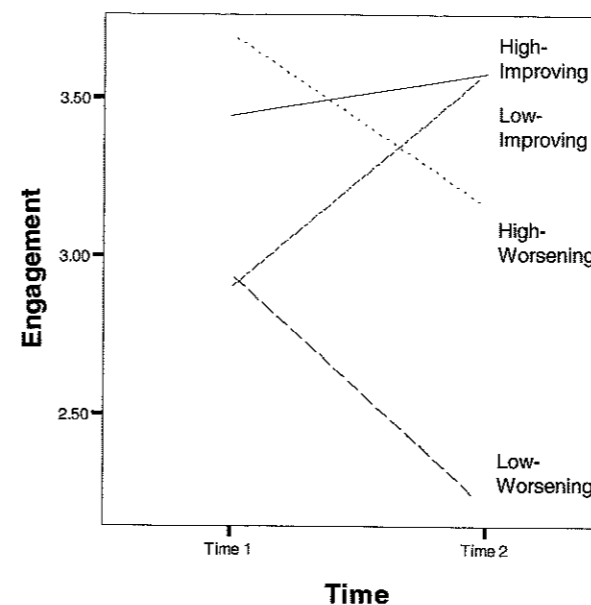


Figure 1. Engagement for different groups at Time 1 and Time 2.

The engagement levels at Time 2 were also analysed. As suggested by Figure 1, significant differences were found between the high-improving and low-worsening performance groups, $t(52) = 7.02, p < .01$, and also between the low-worsening and the average of the high-worsening and low-improving groups, $t(79) = 8.63, p < .01$. No significant difference was found between the high-improving group and the average of the high-worsening and low-improving groups, $t(79) = 1.50, p = .14$.

To test hypothesis 3, a t-test was used to compare engagement scores at Time 2 between the high-worsening organisation and low-improving organisation. A significant difference was found between the two groups, $t(52) = -3.48, p < .01$ ($M = 3.16, SD = .53$ and $M = 3.59, SD = .37$ respectively), even though the scenarios were exactly the same for both groups at Time 2.

Discussion

This study used an experimental design to investigate a causal relationship between organisational performance, changes in performance, and employee engagement.

As predicted in hypothesis 1, manipulating the perceived level of organisational performance affected reported employee engagement in the workplace. The scenario presenting a higher performing organisation at

Time 1 resulted in participants reporting higher imagined engagement than participants presented with the scenario presenting a lower performing organisation at Time 1. Three performance levels were also compared at Time 2. Significant differences were found between the high-improving and low-worsening performance groups.

In support of hypothesis 2, at Time 2 results indicated that on average, scenarios describing improvements in organisational performance lead to reports of higher employee engagement than did scenarios describing worsening performance.

As predicted in hypothesis 3, participants in the low-improving group (i.e., where organisation performance at Time 1 was low but improved in Time 2) showed higher engagement ratings than employees in the high-worsening group (i.e., where organisation performance at Time 2 was high but dropped in Time 2). This result was found despite both groups being given exactly the same vignette at Time 2 (i.e., the description of the actual level of performance at Time 2 was identical across both groups; all that differed was the description given at Time 1). This interesting finding suggests that the direction of change may be more important in determining engagement levels of employees than the actual level of performance. As discussed in the introduction, no previous studies have examined the effect of change in performance. A possible explanation of this finding is that employees may forecast improvement into the future, such that, for an organisation that has improved from Time 1 to Time 2, employees will perhaps assume the organisation will continue to improve into Time 3 and beyond. Similarly, organisations that worsen in performance levels will perhaps be inclined to keep worsening.

These results provide support for a causal link from levels of organisational performance, and changes in performance, to levels of employee engagement. It must of course be acknowledged that the results are vignette-based and what has been demonstrated is that manipulating descriptions of organisational performance cause changes in imagined employee engagement. Nevertheless, vignette-based studies are extensively used in psychology and business and have been shown to predict reactions in equivalent 'real world' situations (Hennessy et al., 1995; Rossi & Nock, 1982). Hence it is not unreasonable to predict that the results demonstrated here would be mirrored in a real-world environment.

It should also be highlighted that these results show an average response tendency, and there may be specific circumstances in which individuals may respond differently. It is logically possible that employees in poorly performing organisations may perceive the poor performance as an opportunity to demonstrate their competence, and hence employee

engagement may be higher. Conversely, employees in a highly performing organisation may feel pressured to maintain the high performance with little hope for further improvement, and hence may experience reduced employee engagement. Nevertheless, the results of this study suggest the predominant pattern of responses is that there is a positive causal link between organisational performance, change in performance and employee engagement.

References

- Bagozzi, R. P. (1980). Performance and satisfaction in the industrial sales force: An examination of their antecedents and simultaneity. *Journal of Marketing*, 44, 65-77.
- Harter, J. K., Schmidt, F. L., & Keyes, C. L. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. Keyes, L. M. Corey & J. Haidt (Eds.) *Flourishing: Positive psychology and the life well-lived.* (pp. 205-224). Washington DC: American Psychological Association.
- Hennessy, M., Macqueen, K. M., & Seals, B. (1995). Using factorial surveys for designing intervention programs. *Evaluation Review*, 19, 294-312.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta analysis. *Psychological Bulletin*, 97, 251-273.
- Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction- job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, 127, 376-407.
- Langford (2007). *Psychometrics of the Voice Climate Survey: Evidence for a lower and higher-order factor structure of work practices and outcomes.* Manuscript submitted for publication. Macquarie University.
- Langford, P. H., Parkes, L. P., & Metcalf, L. (2006). Developing a structural equation model of organisational performance and employee engagement. *Proceedings of the Joint Conference of the Australian Psychological Society and the New Zealand Psychological Society*, Auckland.
- Lawler, E. E., & Porter, L. W. (1967). The effect of performance on job satisfaction. *Industrial Relations*, 7, 20-28.
- Locke, E. A. (1970). Job satisfaction and job performance: A theoretical analysis. *Organisational Behavior and Human Resources*, 5, 484-500.
- Lucas, J. W. (1999). Behavioral and emotional outcomes in leadership in task groups. *Social Forces*, 78, 747-779.
- MacKenzie, S. B., Podsakoff, P. M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing*, 62, 87-98.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organisational citizenship behaviour. *Personnel Psychology*, 48, 775-802.
- Ostroff, C. (1992). The relationship between satisfaction, attitudes, and performance: An organisational level analysis. *Journal of Applied Psychology*, 77, 963-974.
- Ostroff, C., & Schmitt, N. (1993). Configurations of organizational effectiveness and efficiency. *Academy of Management Journal*, 6, 1345-1361.
- Rossi, P. H., & Nock, S. L. (1982). *Measuring Social Judgments: The Factorial Survey Approach.* California: Sage Publications.
- Rucci, A. J., Kirn, S. P., & Quinn, R. T. (1998). The employee- customer- profit chain at Sears. *Harvard Business Review*, 76, 82-97.
- Schwab, D. P., & Cummings, L. L. (1970). Theories of performance and satisfaction: A review. *Industrial Review*, 9, 408-430.
- Siegel, J., & Bowen, D. (1971). Satisfaction and performance: Causal relationships and moderating effects. *Journal of Vocational Behavior*, 1, 263-269.

Testing a Model of the Predictors of Change Success

M. Anthony Machin (machin@usq.edu.au)

Department of Psychology
University of Southern Queensland, Toowoomba QLD 4350 Australia

Majella J. Albion (albionm@usq.edu.au)

Department of Psychology
University of Southern Queensland, Toowoomba QLD 4350 Australia

Abstract

Research has suggested that commitment to organisational change is a mediator between employees' perceptions of organisational climate and change-related outcomes such as behavioural support for change. This study sought to further clarify the role of one component of commitment to organisational change (affective commitment) in mediating the relationships between two aspect of organisational climate, perceptions of change management and change success. We used structural equation modelling to examine a structural model using two large data sets ($N = 2549$ and 2737 respectively). We also conducted a subgroups analysis which examined whether the one structural model was suitable across four separate organisations which comprised the second data set. The overall structural model confirmed that affective commitment to organisational change was a mediator of the relationships between the two aspect of organisational climate, perceptions of change management and change success. The structural model was also similar for the four organisations. These results suggest that while the role of affective commitment to organisational change was similar across the four organisations, perceptions of change management and positive organisational climate were the most important predictors of change success.

Introduction

Interest in employees' commitment to organisational change is justified by the extensive research demonstrating that employees' commitment levels are related to a range of important work-related outcomes such as job satisfaction, work performance, turnover intentions, and actual turnover (Cooper-Hakim & Viswesvaran, 2005). Previous research (Herscovitch & Meyer, 2002; Machin & Bannon, 2005) has demonstrated that the components of commitment to organisational change are differentially related to employees' level of support for those changes and may mediate the influence of organisational climate on the level of support for change. For example, Machin and Bannon found that positive work climate was a significant contributor to the prediction of behavioural support for change even after controlling for affective,

normative, and continuance commitment to organisational change. However, the majority of the variance in behavioural support for change (33% in Study 1 and 55% in Study 2) was accounted for by the commitment to organisational change variables. While employees' level of support for organisational change is regarded as an important indicator of the likelihood of the change succeeding, a better outcome measure may in fact be perceptions of change success.

Wall and Wood (2005) described the importance of differentiating between universalistic, contingency, and configurational theories of management which provide different explanations for the benefits of human resource management (HRM) practices. For example, the contingency theory is that a working environment that aligns all elements of workforce planning, performance management, and business strategies with organisational objectives will be most conducive to coping with the changes taking place in management processes and methods of service delivery. However, it is still unclear which approach is better suited to the management of organisational change.

Rafferty and Griffin (2006) examined public sector employees' perceptions of change from a stress and coping perspective and differentiated between change frequency, the degree of planning for change, and the degree to which change transformed the workplace. Of these three characteristics, change frequency was most strongly related to uncertainty ($\beta = .55, p < .001$) which in turn was related to job satisfaction ($\beta = -.16, p < .01$) and turnover intentions ($\beta = .17, p < .01$). One aspect of the organisational climate (leader support) was related to all three aspects of change confirming that positive work climate is one of the key antecedents for successfully managing change.

Cunningham (2006) also focused on individual employees' reactions to change and whether better coping behaviour would mediate the relationships between components of commitment to change and turnover intentions. The strongest predictor of coping was affective commitment to change while coping with change in turn predicted turnover intentions. The importance of examining factors which can influence

Better Work. Better Organisations. Better World.

Conference Proceedings

**7th Industrial and Organisational Psychology Conference/
1st Asia Pacific Congress on Work and Organisational Psychology**

Editors

Associate Professor Maureen Dollard, University of South Australia

Professor Tony Winefield, University of South Australia

Dr Michelle Tuckey, University of South Australia

Dr Peter Winwood, University of South Australia

Associate Editors

Associate Professor Prashant Bordia, University of South Australia

Professor Saswata Biswas, M.S. University of Baroda, Vadodara, India

Dr Nerina Jimmieson, University of Queensland

Professor David Morrison, University of Western Australia

Professor Michael O'Driscoll, University of Waikato, New Zealand

Professor Kan Shi, Chinese Academy of Science, China

Shelley Rogers, University of South Australia

Apprentice Editors

Master Class Work & Organisational Psychology 2007, University of South Australia

Production Layout and Editing

Cheryl Ayliffe Secretarial Services, Whyalla

Coordinator

Louise Carslake, University of South Australia

Note. The papers presented here have been peer reviewed. The proceedings will be available for purchase following the conference. Order forms can be found on <http://www.psychology.org.au/>