# **GSB WORKING PAPER**

NO. 6



## **EMPLOYEE COMMITMENT IN WESTRAIL**

BY

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CRICOS Provider Code 00301J

ISSN 1323-7853



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#### EMPLOYEE COMMITMENT IN WESTRAIL

#### Abstract

A study conducted in Westrail, the Western Australian Government Railways revealed that three underlying attitudes influenced the three dimensions of commitment (to organisation, work and co-worker) measured in a survey. Achievement of personal and career goals, propensity to stay with the organisation, trust in senior management and positive view of change were shown to be linked with the commitment dimensions and the underlying factors (affective, cognitive and behavioural commitment). Education, union membership, age and tenure were also found to be significantly correlated with aspects of commitment. Large downsizings have occurred at Westrail in recent years and commitment among workers is low, as is trust in senior management. The formal communications system needs attention and there is a general view that recent changes have not been for the positive benefit of the organisation. Linking personal goal achievement to Westrail employment may help to resolve the problem of low morale and commitment.

#### Introduction

Westrail, the Western Australian Government Railway has downsized dramatically over the last decade. This paper outlines recent developments on downsizing within Westrail, reviews the literature on the effects of layoffs and examines the concept of employee commitment through a review of the relevant literature. The results of investigations into commitment levels among Westrail employees are discussed and some comparisons are made with results in two US companies where a similar survey instrument to that used in this study had previously been employed. Some management implications of the findings are discussed.

#### **Downsizing in Westrail**

Privatisation and contracting out of non-core services previously provided by publicly-owned organisations to gain economic benefits through greater competition has of recent years featured in the policy thrust of State and Federal Governments in Australia. The private sector, motivated by profit, is expected to show greater efficiency than is possible for the public sector to achieve when providing similar services in the same market. In most cases, there has been a significant reduction in the workforces of the publicly-owned bodies concerned. A number of these organisations have introduced programmes which offer incentives for employees to apply for voluntary redundancy. Westrail used this mechanism in downsizing from the 1983 level of 7,000 employees to 3,300 by March, 1995. The aim has been to make Westrail cost competitive by improving organisational efficiency.

In April, 1993 the Western Australian State Government approved a plan submitted by Westrail to close the Midland Workshops, Westrail's heavy engineering facility. The workshops were actually closed in April, 1994, eliminating 750 jobs. Westrail's headquarters staff was also reduced by 500 over the same period. All staff reductions were achieved through a voluntary severance scheme which had by March, 1994 attracted 2,483 expressions of interest. Management accepted 1,244 of the applications for release under the scheme, but 1,239 were refused on the basis that the applicants possessed skills considered essential to the organisation. This may mean that many of the current members of Westrail's workforce have at least once taken formal action toward exit from the organisation, which may have significant implications for their present commitment levels.

A reform programme, involving modernisation of equipment, extensive outsourcing of services and the shedding of a further 1,350 jobs from the organisation over the next two years, was announced in May, 1995 (Drabble, 1995). Such a significant reduction in the

workforce is likely to have far-reaching effects. Some unfavourable effects of layoffs are described by Margulis (1994). What he terms a survivor syndrome arises when survivors of layoffs experience both anger because they are working harder without additional compensation and also guilt because they have survived where others did not. Suicides and violence against organisations have occurred. The former Industrial Relations officer at Midland Workshops remarked that there had been some suicides, broken marriages and breakdowns resulting from the closure of the Workshops. According to an officer in the Transport Ministry, threats had been made against one senior Westrail manager and his family. The Workshops closure had been implemented through voluntary redundancies. There were no involuntary severances, yet some of the worst features of the survivors' syndrome described by Margulis were apparent. This suggests that extensive voluntary redundancy programmes may evoke similar reactions to those which occur in response to layoffs.

For survivors, job insecurity arising from the threat of future layoffs is important. One study has shown moderate job insecurity leads to greater work performance but lower organisational loyalty than does low job insecurity (Brockner, 1992). Another study has demonstrated that, when the threat of future layoffs is high, strong feelings of worry about the future lead to higher work motivation amongst survivors, particularly those in low self-esteem groups (Brockner, Grover, O'Malley, Reed and Glynn, 1993). The direct relationship between performance and job insecurity and their inverse relationship to organisational loyalty is of critical importance in understanding the likely productivity and turnover consequences of insecurity arising through changes in Westrail. Brockner's (1992) results suggest that as job insecurity increases, productivity is likely to rise but loyalty will fall away, creating increased turnover. Where an organisation wishes to downsize, as Westrail does, this may not be an adverse outcome, provided the employees affected are not people whose retention is important to the organisation. The results Brockner (1992) and Brockner et al (1993) report suggest that performance and productivity levels of those who eventually depart can be maintained during the transition period.

Management has little control over the interaction between insecurity, performance and turnover, although a well planned and executed communication strategy can make a critical difference (Brockner, 1992; Flatt, 1992; Myers, 1993; Quinn, 1993). The only direct control that the employer can exert over the results of the voluntary redundancy programme arises through the right to reject applications for special severance benefits. The attitudes of employees who have previously made unsuccessful application for such benefits may give some insights into the likely consequences of doing so.

According to an adviser to the Transport Minister, employee morale, motivation, efficiency and effectiveness in Westrail are already at lower than desirable levels. The proposed changes need to be carefully managed to avoid or minimise their potential negative effects on the remaining workforce. Brockner (1992: 10) identifies two factors which affect survivors reactions to layoffs: perceived fairness and changed work conditions. He spells out a number of issues that relate to the way in which the layoffs are implemented and which determine perceived fairness, concluding that productivity and morale among survivors will be greater if in their view the layoffs have been handled fairly. If managers handle the process unfairly, they risk alienating a group whose support they often wish to retain: the people whose loyalty to the organisation at the outset was strongest. Westrail's experience with the workshops closure shows that a voluntary redundancy programme may produce similar negative effects to those of large-scale layoffs, so Westrail must handle the current round of changes carefully if it is to avoid alienating highly committed employees.

#### Commitment

During this century, recognition has grown that maximum organisational productivity comes through aligning the interests of employees with those of the organisations which employ them. Frederick Taylor (1972: Testimony) emphatically declared that a mental revolution where management and workers realised that the best interests of both groups lay in working cooperatively to increase profit margins was the essence of scientific management. Mayo (1977) pointed out that there had never been sustained and widespread, effective and whole-hearted collaboration between the administrative and working groups in industry. Both Taylor and Mayo believed that achieving effective collaboration was the main problem facing the business and broader communities. It is a problem to the resolution of which much attention has been given over the decades since they wrote. The key to the achievement of effective collaboration is commitment and the most important human resource management challenge facing Westrail is that of maintaining and enhancing commitment over the forthcoming period of major organisational change.

Commitment is generally described as an attitudinal phenomenon giving rise to behavioural outcomes. The definition of organisational commitment framed by Mowday, Porter and Steers (1982) encompassed identification with and involvement in the organisation. These authors suggested that a committed employee would believe in and accept the organisation's goals and values; would be willing to exert considerable effort on its behalf; and would strongly wish to maintain membership in the organisation. Clearly, commitment was seen as

an attitude which was be expected to manifest itself strongly in the behaviour pattern of the committed individual.

DeCotiis and Summers (1987) point out that this definition includes concepts extraneous to commitment. Willingness to exert considerable effort could be viewed as an outcome of motivation and may be influenced by factors other than commitment. This concept is therefore excluded from the definition of commitment adopted in this paper. Strong desire to maintain membership is synonymous with propensity to stay with the organisation, which has been shown to be a separate variable (Ingram and Lee, 1990; Jaros, Jermier, Koehler and Sinich, 1993; Johnston, Parasuraman, Futrell and Black, 1990), related for example to job satisfaction as well as commitment measures (Harris, Hirschfeld, Field and Mossholder 1993; McElroy, Morrow, Power and Iqbal, 1993). These results suggest that desire to stay should also be excluded from the concept of commitment. We define commitment as an attitude which involves loyalty toward, identification with and involvement in or with the object to which the individual is committed (Adapted from Robbins, 1993).

Commitment develops from the process of identification through which a person experiences something, someone, or some idea as an extension of the self (Fink, 1992). As a result of this empathy with the attitudes, values or goals of an organisation or group the individual incorporates some of the attributes, motives or characteristics of that model into his or her own cognitive response set (O'Reilly and Chatman, 1986). The mechanism can lead to each of the types of attachment discussed below.

Exchange-based commitment, predicated on the rewards an individual receives through consistent conduct, develops through the side bet mechanism outlined by Becker (1960). According to Becker (who was one of the first authors to attempt to crystallise the concept) the existence of commitment is indicated by consistent human behaviour, even in situations where it may not appear to be in the interests of the person concerned to show such consistency. Becker suggested that commitment develops through what he called side-bets, where earlier actions of the individual constitute 'investments' which would be 'lost' if a consistent line of action were not followed. Commitment could therefore be identified independently of the consistent behaviour which resulted from its existence. Three major components were required: prior actions of the person through which some originally extraneous interest was staked on that person's following a consistent line of activity; the person recognising that the originally extraneous interest was involved in the present activity; and a consistent line of activity needed to be followed (Becker, 1960: 36).

Both affective commitment, which underlies the attachment Harris et al (1993) term identification, and moral commitment, which results from internalisation, arise through recruitment and socialisation emphasising strong value systems. According to Harris et al (1993: 460), socialisation practices emphasising rewards were associated with greater degrees of compliance and lesser degrees of affective and moral (which were referred to jointly as 'normative') commitment. Katz (1964) points out that internalisation can occur either through the childhood socialisation process (where an individual has a vision of himself or herself as for example an actor or police officer) or through the adult socialisation process conducted in the organisation itself. In the former case, selection procedures can help identify the individual who already has a degree of normative commitment to the work or to the organisation. In either case, effective organisational socialisation practices build on the personal values of the group members and integrate them about an attractive model of the organisation's ideals (Katz, 1964). Clear and inspirational vision statements are important tools in the achievement of effective socialisation and the building of normative commitment.

Fink (1992) discusses several dimensions of commitment, making the point that most commitment research examines identification with the organisation's goals, values, and mission. There has been little research on the ways in which employees identify with their work or their co-workers, both of which could have powerful effects on employee performance. A multi-dimensional view is helpful to the understanding of the impact of commitment in large organisations. It is likely to be particularly useful where an organisation employs a number of professional staff (for example engineers), when commitment to the occupation may be an important factor (Alutto, Hrebiniak and Alonso, 1973; Aranya and Jacobson, 1975; Gunz and Gunz, 1994; Ritzer and Trice, 1969). Where union membership is significant, co-worker commitment may also be important (Ritzer and Trice, 1969).

Commitment plays a role in determining individual behaviour. Katz (1964) outlines a number of patterns of individual motivation which are likely to be influenced by the various types of commitment. He identifies three behaviours essential to organisational survival. The first two he mentions are that people must enter and remain in the organisation; and that they must carry out their role assignments in a dependable fashion. These behaviours suggest commitment based on continuance or compliance and Katz (1964) relates the behaviours to three particular sources of motivation, all based on rewards extrinsic to work itself. The motivation sources are rule compliance or conformity to system norms; instrumental system rewards; and instrumental individual rewards. The first two motivational patterns are associated with the minimum quality and quantity of work necessary to remain in the system, whilst the third can inspire greater than minimum performance.

The third crucial behaviour Katz (1964) identifies is innovative and spontaneous activity, going beyond role specifications, toward the achievement of organisational objectives. This type of behaviour cannot be mandated and is unable to be recognised by instrumental system rewards, although it may be partially stimulated by instrumental individual rewards. Katz (1964) describes three other motivational patterns which in a well-managed system are likely to result in innovative and spontaneous behaviour. These are: intrinsic satisfaction from role performance (which would be associated with normative commitment to the work itself); internalisation of organisational goals (indicative of normative commitment to the organisation); and social satisfaction derived from primary group membership (showing normative commitment to co-workers). Normative commitment is therefore associated with motivation patterns that result in the innovative and spontaneous activity essential to organisational survival and prosperity. The Katz (1964) framework supports Fink's (1992) contention that commitment in each of the three areas mentioned is important to organisational performance.

As Fink (1992) notes, performance measures are inherently subjective. Nevertheless, his study found positive correlations (in both companies involved) between appraised performance and each of the dimensions of commitment measured. Mowday, Porter and Steers (1982) found evidence of the existence of a cycle of organisational commitment leading to enhanced performance, which then feeds back to increase organisational commitment. This study also relied on performance ratings, with their inherent subjectivity. The Meyer, Paunonen, Gellatly, Goffin and Jackson (1989) study uncovered an important distinction in the relationships between continuance and affective commitment on the one hand and supervisor-rated performance on the other. Continuance commitment was found to correlate negatively with assessed performance and promotability, whilst the correlations between these variables and affective commitment, though weaker, were positive. This supports the conceptual framework outlined by Katz (1964), in which compliance produces performance at the minimum level necessary to maintain organisational membership and normative commitment is associated with higher levels of performance.

McElroy, Morrow, Power and Iqbal (1993) used three quite objective measures of performance in their study of insurance agents: proportion of annual income from renewals; annual earned income; and proportion of income from insurance. The study employed the Occupational Commitment Questionnaire (Mowday, Porter and Steers, 1982), which is indicative of affective, rather than continuance, commitment (Meyer et al, 1989). Three aspects of commitment were measured in the study, which found that: job involvement was positively correlated with annual earned income but with no other performance measures; professional commitment was positively correlated with each of the performance measures,

most strongly with annual earned income; and community commitment had no statistically significant correlations with any of the performance measures. This study in particular, because of the objectivity of the performance measures, provides strong evidence of the link between employment-related commitment and work performance.

#### **Commitment in Westrail**

A survey was conducted amongst four groups of Westrail employees to ascertain their levels of commitment to their work, to their co-workers and to the organisation. The first two Westrail groups, each of twenty employees, to whom survey instruments were issued had been selected by senior management to attend a course devised by a private consultancy practice. The aim of the course was to enhance commitment amongst the employees. The participants were selected on the basis of management's assessment of them as likely champions of positive change within the organisation. Of the forty people in these groups, thirty-eight (95%) completed and returned the forms during their attendance at the course. A third group of forty employees was selected by senior management. This group consisted of those employees managers would have selected for the course had the individuals actually selected been unavailable. Survey instruments were sent through Westrail's internal mail system and these people were not told that they had been singled out in any way. To them, it appeared that they were part of a random sample. Thirty-four of the forty forms (85%) sent out were completed and returned.

Instruments were also sent to a random sample of the 3,298 Westrail employees. Management provided a list of employees, arranged by division and then by service number. One of the first 20 employees on the list was selected at random and he and each 20th employee thereafter was sent a questionnaire. Of the 165 questionnaires sent, 76 were returned. Due to omitted responses, only 72 were fully useable. The response rate here, approximately 46% (44% useable), means that there is potential for a response bias in the results. For example, perhaps the more committed employees have responded - or perhaps trade union members have been less inclined to do so, given current uncertainties and the fact that there is some strain in the relationship between unions and management. Any bias in the results arising from lack of responses seems likely to show a more favourable view of circumstances in the organisation than is the actual case.

The survey enabled some comparisons to be made between Westrail and the companies in the Fink (1992) study. Each of those companies was a technologically-advanced, multinational manufacturing firm. Each was the major employer in its particular city, employing about 600 people and maintaining a fairly strong policy of promotion from within. Company A, an eighty year old, family-owned concern, was the more innovative of the two, valuing its employees, giving them opportunities to grow in their jobs and believing in participative management. Company B, only forty years old, was more traditional and formal in its approach, maintained a strict hierarchy and adopted top-down management. Employee discontent was a problem for Company B, which recognised that revisions to management practices might be needed. Company A was eager to receive the research results so that it could learn and improve (Fink 1992). Westrail has much in common with Company B and Ross Drabble, the chief executive of Westrail, enthusiastically supported the research. He expected to obtain information which would assist in his efforts to change the organisation.

The survey form was designed around the Commitment Diagnosis Instrument (CDI) created by Fink (1992). The CDI contains 30 statements to which respondents indicate their level of agreement on a 7-point scale (anchor points: 0 - not true at all; 6 very true). Half the propositions are negatively phrased, with the results reverse scored, so higher scores always reflect higher commitment. Ten items measure commitment to the work itself; ten commitment to co-workers; and ten commitment to the organisation. Scores on the propositions within each of these groups were summed to give an overall commitment score on the dimension concerned. A total score was computed by summing the scores on the dimensions.

The study also explored other employee attitudes to enable an assessment to be made of the association between particular organisational features and commitment. A number of questions, each employing the seven-point scale outlined above, were asked. There were items which measured extent of desire for greater employment responsibilities, whether respondents had reached some personal goals, and their expectation of achieving career goals, through their employment at Westrail. Communication is of critical importance within any organisation and with large changes soon to be made, this was especially so of Westrail. One proposition was included to test the extent to which employees believed that formal communications within Westrail were poor. A second proposition measured whether employees first heard about changes through formal channels or informal ones. Employees were also asked to indicate the extent to which they trusted senior management to do what was in the best interests of the organisation, rather than just what was in their own interests. An item was included to measure the extent to which changes within Westrail over the preceding two years were seen to have benefited the organisation. Respondents were asked to indicate whether they had previously applied for voluntary severance benefits and the likelihood of their doing so in the event that severance benefits were offered in future.

Additional information was sought on age, tenure with Westrail, level of education (each in a six category check-list), and people were asked to indicate whether or not they were union members.

Gender information was also requested. Due to the extremely high ratio of males to females (over 20 to 1) in the organisation, each of groups 1 and 2 included only one female respondent. There were none in group 3 and only three in group 4, making any meaningful analysis of results by gender impossible.

#### **Analysing the Data**

Internal reliability of the survey instrument based on the 38 items measured on seven-point scales was quite high (alpha = .9162). There was a multiplicity of strong, statistically significant correlations among the responses to the CDI propositions. These correlations were across as well as within the three commitment dimensions and resulted in quite high intercorrelations, all significant at the 0.1% level, amongst the scores on these dimensions. The correlations are set out below and contrasted with those obtained for the two companies in the Fink study (1992: 41).

Dimensions	Company A	Company B	Westrail
Work and Co-worker	.44	.47	.63
Co-Worker and Organisation	.48	.52	.66
Work and Organisation	.56	.66	.81
Co-Worker and Total Score	.75	.77	.83
Work and Total Score	.83	.86	.92
Organisation and Total Score	.84	.88	.93

Table 1: Correlations Between CDI Scores for Westrail, Company A and Company B

Intercorrelations between the categories are stronger in the case of Westrail than of Company B, which in turn exhibits stronger intercorrelations than does the data from Company A. This may be explained by the rigidity of the bureaucratic form of organisation. Westrail, being a government instrumentality, has a history of strong bureaucracy and Company B is said to be the more bureaucratic of the two in the Fink study. In a bureaucracy, rules govern work and organisational relationships, so that the three categories are not as differentiated as might be the case in a more flexible environment.

Another possible explanation for the close correlation between commitment to the work and commitment to the organisation in Westrail is quite simple. Until very recently, Westrail was the only general rail service operating in Western Australia. It seems reasonable to expect that commitment to work in the railway industry would be closely linked to commitment to the only organisation operating in that industry. If the industry were comprised of several organisations, it is quite likely that commitment to the organisation and commitment to the work itself would behave more independently of each other, as is the case with companies A and B.

Mean scores and standard deviations on the commitment scales are reported below. The maximum possible score is 60 on each dimension and 180 in total. The Westrail scores are those relating to the random sample, as including the selected groups would introduce a positive bias into the results. The Westrail random sample scores are compared with those of the two companies in the Fink (1992) study. In each case, the score obtained by Company A and by Company B is being compared with that of Westrail on the dimension concerned.

	WESTRAIL		MEAN VALUES (Significance of difference with Westrail)			
DIMENSION	Sample Size	Std Devn	Company A*	Westrail	Company B*	
Work	75	10.72	40.5 (ns)†	39.0	38.9 (ns)	
Co-Worker	75	8.04	37.0 (ns)	35.5	38.0 (1%)	
Organisation	73	11.21	39.0 (1%)	32.4	35.0 (ns)	
Total	72	27.03	116.8 (1%)	107.5	112.2 (ns)	

<sup>\*</sup> See table 5.11, page 58, Fink (1992)  $\dagger$  (ns) = not statistically significant

Table 2: Difference of Mean CDI Scores for Westrail, Company A and Company B

Co-worker commitment is lower in Westrail than in either of the US companies, significantly so in the case of Company B. This result is somewhat unexpected, given the high rate (92% in the random sample) of union membership in Westrail. Company B was the more traditional and formal of the two US companies and the higher level of co-worker commitment there may reflect a 'banding together against the common enemy,' management. In Westrail's case, the low co-worker commitment may reflect a preoccupation with individual concerns in the face of the pending downsizing.

The low score on organisational commitment in Westrail would give cause for concern in normal circumstances. The pending significant downsizing may well be the explanation for this and low levels of organisational commitment may assist the downsizing process. The danger is that those employees whose commitment is low may be the very people whom the organisation would like to retain.

Commitment to work in Westrail shows no significant difference from either of the US companies. The Westrail pattern of high work and low organisational commitment is entirely consistent with the effects noted by Brockner (1992) in circumstances where job insecurity is high.

In the Westrail data, there were strong intercorrelations between responses on almost all items in the CDI, which suggested that some underlying general attitudes may have influenced commitment in all three dimensions. To investigate this possibility, Principal Components Analysis with Varimax rotation was performed. Seven statistically significant factors, explaining a total of 61.5% of the variance in the data, emerged when this procedure was first undertaken. When the structure of the factors was examined, there was no readily identifiable, distinct underlying attitude influencing each of the last four factors and it was decided that further reduction of the data was likely to produce a more useful framework, even if a lesser proportion of the total variance in the data were captured in the process.

Both three and four factor analyses were examined. In the latter case, the fourth factor had only one variable loading strongly and so this framework was discarded. In the three factor framework, twenty-seven of the thirty-three variables showed a correlation coefficient (communality) of at least .4 with one or other of the factors. Although these factors explained only 44% of the variance in the data, they show three distinct attitudes underlying the responses to the CDI questions. This framework, which provides a useful basis for further analysis, is described in the table below. The factor names were chosen to try to convey the common essence of the items involved.

#### **Affective Commitment**

I feel pleased when I learn about my organisation's achievements.

My organisation's goals help me to fulfil my own goals.

I look forward to seeing my co-workers every day.

I tend to get defensive when I hear or read negative comments about my organisation.

My work is a major source of need satisfaction in my life.

There are other organisation I'd rather work for than this one. (reverse-scored)

Just doing the work that I do is its own reward.

I find it difficult to see people from my Division leave; it's like losing a family member.

If more organisations were like this one, the world might be a better place.

#### **Cognitive Commitment**

I don't pay much attention to information about how my organisation is doing.

I tend to mind my own business and let others take care of theirs.

I tend to watch the clock and look forward to leaving work.

My work day tends to drag and seems endless.

Once the work leaves my Division, I don't think much about it.

I find it hard to concentrate on my work; I think more about other things.

I make sure my own work gets finished before I check to see if someone else needs help.

When I'm not at work I don't think about work.

I believe that I could do a better job if I could just be left alone.

For the sake of the organisation I am usually ready to let another Division's needs take priority over my own Division's needs.

The behaviour of the Commissioner is not something that affects me personally.

(Each of these items except the second last is reverse-scored)

#### **Behavioural Commitment**

I am usually aware of how others around me are doing in their work.

I am usually ready to help out when my co-workers need my help.

I take pride in the quality of my own work.

I have little sense of where my own work fits into or contributes to the organisation as a whole. (reverse-scored)

I get very little out of interacting with the people around me. (reverse-scored)

I constantly strive to improve my skills in my job.

When new people come on board I make every effort to help them become members of the group.

**Table 3: The Underlying Factors (Continued)** 

The following propositions do not load strongly on any of the three factors. They are three which have small total communalities.

I tend to become absorbed in my work to the point where I shut everything else out.

I don't enjoy the work that I do very much.

I don't mix work and friendship.

**Table 4: Propositions Not Loading on Factors** 

The data were checked for intercorrelations between the independent variables included in the study and for correlations between these variables, the scores on the CDI scales and the factor scores. Quite a large number of statistically significant correlations were found and in view of this, partial correlations between each pair of variables for which a significant relationship was found in the raw data were calculated. The calculations were made controlling for other independent variables showing in the raw data significant relationships with either of the variables in the pair currently being tested. Dichotomous variables were handled by dividing respondents into two groups according to their response on the dichotomous variable concerned. A t-test was then conducted for significant differences between the mean scores of each group on the variables of interest. The following chart summarises the results of these investigations. The significance level is 5%.

Figure 1: Statistically Significant Direct Relationships

There were two sets of relationships of particular interest contained in these data: those between the independent variables and the commitment measures; and those between the personal characteristics and the commitment variables. These are set out below in schematic form and commented upon. We first examine the independent variables:

Figure 2: The Independent Variables and the Commitment Measures

These results suggested that goal congruence and commitment were closely related. A view that Westrail employment has in the past contributed to the achievement of personal goals was positively linked with commitment scores on all three dimensions of the CDI and with two of the three underlying factors. A belief that future career goals will be met through Westrail employment was linked to the third factor and to two of the three dimensions - commitment to the organisation and to the work itself. The perceived likelihood of career goal achievement also correlated positively with propensity to stay, trust in senior management and a positive view of change. People who expected to achieve career goals through Westrail employment were also more likely to be told about changes through formal channels than to hear about them on the grapevine. The two goal-related variables were intercorrelated. Whilst causality could not be determined from this study, it was clear that the relationships between commitment, past achievement of personal goals and perceived likelihood of achieving career goals were important ones.

A number of other studies had found significant relationships between commitment and various aspects of communication. Johnston et al (1990) showed a significant relationship between leadership role clarification and organisational commitment. The McElroy et al (1993) study showed positive correlations of feedback with professional commitment and job involvement. In their meta-analysis of four samples totaling 583 respondents, Mathieu and Zajac (1990) found a large positive correlation between leader communication and organisational commitment. DeCotiis and Summers (1987) reported a similar results. There appears to be a strong relationship between communication and commitment. In the current study, the absolute communication variable showed strong links with all the other independent variables when the original correlations were calculated. When partial correlations between this and each of the other independent variables were calculated whilst controlling for the independent variables not involved in the particular calculation, the only statistically significant relationship was with the variable measuring the extent to which the individual desired greater personal responsibility in his or her employment. This suggests that an individual's experience of the formal communications system plays a moderating rather than a direct role in the development of commitment.

The desire for greater personal responsibility was quite widespread. Only 17% of respondents indicated disagreement with the suggestion that they would like to have greater responsibilities within their employment. Of the remaining 83%, there were 11.5% whose response was neutral and the rest indicated agreement. This attitude showed no statistically significant relationship with any variable other than absolute rating of formal communication. It is possible that there is no real link between the two variables and that the observed correlation is simply a coincidence. Alternatively, both may be related to some other variable (job satisfaction, for instance) that has not been measured in this study.

Significant relationships with personal characteristics are outlined below.

Figure 3: Personal Characteristics, the Commitment Measures & Propensity to Stay

The correlation between higher levels of education and commitment to work parallels the finding by Mathieu & Farr (1991) of a positive correlation between education and job involvement in a sample of engineers. McElroy et al (1993), on the other hand, found a negative correlation between professional commitment and education among insurance agents. In the case of Westrail, many of the more highly educated staff members are likely to be practicing their professions (which may not be the case with insurance agents) so that it was not surprising to see the positive correlation between commitment to the work itself and education level in this organisation. Education was also linked to two of the three underlying factors - cognitive and behavioural commitment - and to a positive view of change. This suggested a more pragmatic outlook by those with higher education.

In contrast, union membership, which was negatively related to level of education, also correlated negatively with the cognitive aspect of commitment. It had an indirect positive association with affective commitment through its connection with tenure and age. The link with tenure suggested that union membership came about through the socialisation process. The correlations implied that newer, more highly-educated employees were less inclined to join the union than longer-standing employees, indicating a waning of union influence and the possibility of a consequent reduction of conflict between management and workers.

The overall relationships found between the study variables are summarised in the diagram below.

Figure 4: Personal Characteristics, Independent Variables & the Commitment Measures

To determine whether there were any significant differences between the various groups of respondents, non-parametric (Kruskal-Wallis 1-way ANOVA) tests for differences between groups were run in respect of the variables age, tenure, education, union membership and past application for severance, as these are all ordinal-scaled. The following statistically significant results were found:

Variable	Groups 1 t	to 3 (n=72)	Group 4	l (n=74)	Significance
	Measure	Value	Measure	Value	of Difference
Age	Mode	46-55	Mode	36-45	.0114
Union Membership	Proportion	74%	Proportion	92%	.0127
Education	Mode	Bachelor's Degree	Mode	Year 10/ Junior Cert.	.000

**Table 5: Comparison Between Groups on Ordinal Variables** 

The other variables and the factors were tested for differences in means between the scores associated with groups 1 to 3 and those of group 4. The following table sets out those of the results which were statistically significant.

Variable	Groups 1	- 3 (n=72)	Group	4 (n=74)	Difference of Means	
	Mean	Std Dev	Mean	Std Dev	Amount	Signif
<b>Absolute Comm</b>	2.47	1.52	1.79	1.95	0.68	.018
Formal V Grapevine	2.42	1.58	1.66	1.99	0.76	.011
<b>Propensity to Stay</b>	3.53	1.91	2.83	2.31	0.70	.047
Trust in Senior Mgt	3.11	1.67	2.30	2.01	0.81	.009
<b>Benefits of Change</b>	4.54	1.29	2.63	2.13	1.91	.000
<b>Past Personal Goals</b>	4.69	.91	3.87	1.93	0.82	.001
<b>Career Goals</b>	3.94	1.41	3.11	2.03	0.83	.004
CDI Work	45.43	6.43	38.96	10.72	6.47	.000
CDI Co-Worker	39.60	6.93	35.52	8.04	4.08	.001
CDI Organisation	40.35	5.76	32.36	11.21	7.99	.000
Cognitive	.5862	.608	5781	.976	1.1643	.000

**Table 6: Between Groups Comparison of Mean Differences** 

It appears that the selected groups were more strongly linked to the organisation and held attitudes generally more positive than those of the workforce at large. There were still areas of weakness, notably in respect of formal communications and trust in senior management. If the individuals in the selected groups are to serve as positive agents for change, they must be convinced of the value to the organisation of the proposed changes and they must be convinced of the fairness of the system of implementation. Otherwise, as Brockner (1992) warns, this is the group most at risk of being alienated by the changes, a result which would create serious problems in the management of the transition.

#### **Conclusion**

The mean scores registered by respondents in the random sample on almost all variables are at the negative end of the scale. There is clearly a problem in the formal communications area (to which mangement is devoting attention). Low levels of trust in senior management and the negative view of change need to be addressed if the change process is to succeed in creating an organisation which delivers desired outcomes such as responsive and flexible service and customer satisfaction at all times (Drabble, 1995). A committed body of employees is much more likely to deliver these outcomes than one which is disillusioned, detached and alienated.

The importance of personal goal achievement - expected in the future or actual in the past - suggests that the solution to this management problem may be to help those individuals Westrail wishes to retain relate their employment to their personal goals. If these people understand how their work achievements lead to the realisation of personal goals, their commitment is likely to remain strong. High levels of performance can then be expected from people whose contributions are critical to the success of the organisation and the success of the organisation is likely to follow. As part of the process associated with the current downsizing, managers are discussing individual future plans and prospects with all employees and this intervention may make a crucial difference to the motivation and performance of those workers who stay with the organisation.

#### References

- Alutto, Joseph A., Hrebiniak, Lawrence G. and Alonso, Ramon C. (1973) On Operationalising the Concept of Commitment. Social Forces, 51 (June): 448-454.
- Aranya, N. and Jacobson, D. (1975) An Empirical Study of Theories of Organizational and Occupational Commitment. The Journal of Social Psychology, 97: 15-22.
- Becker, Howard S. (1960) Notes on the Concept of Commitment. The American Journal of Sociology, 66: 32-40.
- Brockner, Joel. 1992: Managing the Effects of Layoffs on Survivors. California Management Review, 34 (2): 9-28.
- Brockner, Joel; Grover, Steven; O'Malley, Michael N; Reed Thomas F and Glynn, Mary Ann. (1993) Threat of Future Layoffs, Self-Esteem, and Survivors' Reactions: Evidence from the Laboratory and the Field. Strategic Management Journal, 14 (Summer): 153-166.
- DeCotiis, Thomas A. and Summers, Timothy P. (1987) A Path Analysis of a Model of the Antecedents of Organisational Commitment. Human Relations, 40 (7): 445-470.
- Doran, Lucinda I., Stone, Veronica K., Brief, Arthur P. and George, Jennifer M. (1991) Behavioural Intentions as Predictors of Job Attitudes: the Role of Economic Choice. Journal of Applied Psychology, 76 (1): 40-45.
- Drabble, Ross. (1995) The Modernisation of Westrail. Perth, Western Australia: Western Australian Government Railways.
- Festinger, Leon. (1962) A Theory of Cognitive Dissonance. London: Tavistock Publications.
- Fink, Stephen L. (1992) High Commitment Workplaces. New York: Quorum Books.
- Flatt, J. Gordon. (1992) Intelligent Cost-Cutting Restructuring for the Long Term Means Careful Trimming Now. CA Magazine, 125 (11): 23-26.
- Gunz, Hugh P. and Gunz, Sarah P. (1994) Professional/Organizational Commitment and Job Satisfaction for Employed Lawyers. Human Relations, 47 (7): 801-829.

- Harris, Stanley G.; Hirschfeld, Robert R.; Field, Hubert S. and Mossholder, Kevin W. (1993) Psychological Attachment: Relationships with Job Characteristics, Attitudes and Preferences for Newcomer Development. Group and Organisation Management, 18 (4): 459-481.
- Horn, Peter W, Katerberg, Ralph Jr, and Hulin, Charles L. (1979) Comparative Examination of Three Approaches to the Prediction of Turnover. Journal of Applied Psychology, 64 (3): 280-290.
- Ingram, Thomas N. & Lee, Keun S. (1990) Sales Force Commitment and Turnover. Industrial Marketing Management, 19: 149-154
- Jaros, Stephen J.; Jermier, John M.; Koehler, Jerry W.; and Sinich, Terry. (1993) Effects of Continuance, Affective and Moral Commitment on the Withdrawal Process: An Evaluation of Eight Structural Equation Models. Academy of Management Journal, 36 (5): 951-995.
- Johnston, Mark W.; Parasuraman, A; Futrell, Charles M. and Black, William C. (1990) A Longitudinal Assessment of the Impact of Selected Organisational Influences on Salespeople's Organizational Commitment During Early Employment. Journal of Marketing Research, 27 (August): 333-344.
- Katz, Daniel. (1964) The Motivational Basis of Organisational Behaviour. Behavioural Science, 9: 131-146.
- Kunda, Gideon. (1992) Engineering Culture: Control and Commitment in a High-Tech Corporation. Philadelphia: Temple University Press.
- Margulis, Stephen T. (1994) Bad News, Good News about Downsizing. Managing Office Technology, 39 (4): 23, 24.
- Mathieu, John E. and Farr, James L. (1991) Further Evidence for the Discriminant Validity of Measures of Organizational Commitment, Job Involvement, and Job Satisfaction. Journal of Applied Psychology, 76 (1): 127-133.

- Mathieu, John E. and Zajac, Dennis M. (1990) A Review and Meta-Analysis of the Antecedents, Correlates and Consequences of Organizational Commitment. Psychological Bulletin, 108 (2): 171-194.
- Mayo, Elton. (1977) The Human Problems of an Industrial Civilization. (Reprint) New York: Arno Press.
- McElroy, James C.; Morrow, Paula C.; Power, Mark L. and Iqbal, Zufar. (1993) Commitment and Insurance Agents' Job Perceptions, Attitudes and Performance. The Journal of Risk and Insurance, 60 (3): 363-384.
- Meyer, John P.; Paunonen, Sampo V.; Gellatly, Ian R.; Goffin, Richard D. and Jackson, Douglas N. (1989) Organizational Commitment and Job Performance: It's the Nature of the Commitment That Counts. Journal of Applied Psychology, 74 (1): 152-156.
- Mowday, Richard T.; Porter, Lyman W. and Steers, Richard M. (1982) Employee-Organisation Linkages: The Psychology of Commitment, Absenteeism and Turnover. New York: Academic Press.
- Myers, Jeffrey E. (1993) Downsizing Blues: How to Keep Up Morale. Management Review, 82 (4): 28-31.
- O'Reilly C. A. and Chatman, J. (1986) Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification and Internalization on Prosocial Behaviour. Journal of Applied Psychology, 71 (3): 492-499.
- Quinn, Judy. (1993) Dealing with Downsizing. Incentive, 167 (10): 58-63.
- Ritzer, George and Trice, Harrison M. (1969) An Empirical Study of Howard Becker's Side-Bet Theory. Social Forces, 47 (June): 475-478.
- Robbins, Stephen P. (1993) Organisational Behaviour: Concepts, Controversies and Applications: Sixth Edition. Englewood Cliffs, New Jersey: Prentice Hall International.
- Taylor, Frederick W. 1972: Scientific Management. (Reprint) Connecticut: Greenwood Press.

# **Personal Information**

Name:		
(Optional)		
What is your age? Please tick:	Under 18 years	
,	18 - 25 years	
	26 - 35 years	
	36 - 45 years	
	46 - 55 years	
	over 55 years	
For how many years have you been employed by Westrail? Please tick:	Under 2 years	
	2 - 5 years	
	6 - 10 years	
	11 - 15 years	
	16 - 20 years	
	over 20 years	
Gender: Please tick:	Female	
	Male	
Are you a union member? Please tick:	Yes	
	No L	
Please tick the highest level of education you have attained:	Left school before year 10	
attanieu.	Year 10 / Junior Certificate	
	TEE / Leaving Certificate /	
	Matriculation	
	TAFE / Technical School	
	qualification	
	Bachelors degree	
	Postgraduate qualification	
	- 1	
Have you ever applied for voluntary severance benefits?	Yes	
Please tick:		
	No	

For each item below circle the number that best reflects your attitude or behaviour.

1.	I tend to be	come absorb	ed in my work i	to the point wi	nere I shut ever	ythin	g else out.
	Not True A	at All	2	3	4	5	Very True
2.	I am usuall	y aware of ho	ow others aroun	d me are doin	g in their work.		
	Not True A	at All 1	2	3	4	5	Very True 6
3.	I feel pleas	ed when I lea	rn about my or	ganisation's a	chievements.		
	Not True A	at All 1	2	3	4	5	Very True 6
4.	I don't enjo	by the work th	nat I do very mu	ıch.			
	Not True A	at All 1	2	3	4	5	Very True
5.	I am usuall	y ready to he	lp out when my	co-workers n	eed my help.		
	Not True A	at All	2	3	4	5	Very True
6.	I don't pay	much attenti	on to information	on about how	my organisation	n is d	oing.
	Not True A					_	Very True
	0	1	2	3	4	5	6
7.	I take pride	in the quality	y of my own wo	ork.			
	Not True A	at All 1	2	3	4	5	Very True 6
8.	I tend to m	ind my own b	ousiness and let	others take ca	are of theirs.		
	Not True A	at All	2	3	4	5	Very True 6
9.	My organis	sation's goals	help me to fulf	ïl my own goa	als.		
	Not True A	t All					Very True

	0	1	2	3	4	5	6
10.	I tend to w	atch the clock	and look forwa	ard to leaving	work.		
	Not True A	At All					Very True
	0	1	2	3	4	5	6
11.	I look forw	ard to seeing	my co-workers	every day.			
	Not True A	At All					Very True
	0	1	2	3	4	5	6
12.	I have little a whole.	e sense of whe	ere my own wor	rk fits into or o	contributes to th	ne org	ganisation as
	Not True A	At All 1	2	3	4	5	Very True 6
13.	My work o	lay tends to dr	ag and seems e	ndless.			
	Not True A	At All 1	2	3	4	5	Very True 6
14.	I don't mix	work and frie	endship.				
	Not True A	At All					Very True
	0	1	2	3	4	5	6
15.	Once the v	vork leaves my	y Division, I do	on't think muc	ch about it.		
	Not True A	At All					Very True
	0	1	2	3	4	5	6
16.	I find it ha	rd to concentra	ate on my work	; I think more	e about other th	ings.	
	Not True A	At All					Very True
	0	1	2	3	4	5	6

17.	I make su help.	re my own	work gets fi	nished before	I check to see	if someone e	lse needs
	Not True 2	At All	2	3	4	V 5	ery True
18.	I tend to g	get defensiv	e when I hear	or read negati	ve comments	about my orga	nisation.
	Not True 2	At All 1	2	3	4	5 V	ery True 6
19.	When I'm	not at wor	k I don't thin	k about work.			
	Not True .	At All	2	3	4	5 V	ery True 6
20.	I believe t	hat I could	do a better jo	b if I could jus	t be left alone.		
	Not True 2	At All	2	3	4	5 V	ery True
21.			organisation lown Division	I am usually r n's needs.	eady to let an	other Division	n's needs
	Not True .	At All 1	2	3	4	V 6	ery True
22.	My work	is a major s	ource of need	l satisfaction in	n my life.		
	Not True .	At All	2	3	4	5 V	ery True
23.	I get very	little out of	interacting w	vith the people	around me.		
	Not True 2	At All	2	3	4	5 V	ery True
24.	There are	other organ	isation I'd ra	ther work for t	han this one.		
	Not True 2	At All	2	3	4	5 V	ery True 6
25.	Just doing	the work the	hat I do is its	own reward.			

	Not True A	At All					Very True
	0	1	2	3	4	5	6
26.	I find it of member.	difficult to se	e people from	my Division	leave; it's like	e losi	ng a family
	Not True A	At All					Very True
	0	1	2	3	4	5	6
27.	If more or	ganisations w	ere like this one	e, the world m	ight be a better	place	·.
	Not True A	At All					Very True
	0	1	2	3	4	5	6
28.	I constant	ly strive to im	prove my skills	in my job.			
	Not True A	At All					Very True
	0	1	2	3	4	5	6
29.	When new of the grou		on board I ma	ke every effo	rt to help them	beco	me members
	Not True A	At All					Very True
	0	1	2	3	4	5	6
30.	The behav	viour of the Co	ommissioner is	not something	that affects me	pers	onally.
	Not True A	At All	2	3	4	5	Very True 6
31.	Formal co	mmunications	within Westra	il are poor.			
	Not True A	At All					Very True
	0	1	2	3	4	5	6
32.	I would p Westrail.	personally like	e to have great	ter responsibi	lities within m	y em	ployment at
	Not True A	At All					Very True
	0	1	2	3	4	5	6
33.	I have bee	n able to reacl	n some persona	l goals throug	h my employme	ent at	Westrail.
	Not True A	At All					Very True

	U	1	2	3	4	5	6
34.			ent within Wes just what is in			st int	erests of the
	Not True	At All					Very True
	0	1	2	3	4	5	6
35.	I expect to	achieve my c	areer goals thro	ough my empl	oyment at Wes	trail.	
	Not True	At All					Very True
	0	1	2	3	4	5	6
36.	Changes v	within Westrai	l over the last t	wo years have	benefitted the	organ	isation.
	Not True	At All					Very True
	0	1	2	3	4	5	6
37.	If an offer	was made, I v	would be likely	to apply for a	special redund	ancy <sub>]</sub>	package.
	Not True	At All					Very True
	0	1	2	3	4	5	6
38.	I am told the grapev		s through form	al channels b	efore I hear ab	out th	nem through
	Not True	At All					Very True
	0	1	2	3	4	5	6

Please post your completed questionnaire to the researchers in the pre-paid envelope provided.

Thank You For Your Help!

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