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JOB SATISFACTION AMONG NEW ZEALAND LOGGING WORKERS

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ABSTRACT

This Report examines the satisfaction that 299 logging workers from the Bay of Plenty and Northland derive from six aspects of their job; the work itself, on-site supervision, off-site supervision, pay, promotional opportunities and co-workers. Greatest satisfaction was expressed with their immediate supervisor and co-workers. These were followed by satisfaction with their off-site supervisor, the work itself and pay. Least satisfaction was expressed with their perceived promotional opportunities. Comparisons with the rest of the New Zealand male workforce suggest that logging workers are more dissatisfied with their pay and promotion. Loggers who intend to leave the industry over the next 5 years were significantly more dissatisfied with the work, their promotional opportunities and their pay.

INTRODUCTION

A considerable amount of the research carried out by industrial and organisational psychologists focuses on the nature, causes and consequences of job satisfaction. This research has consistently shown that dissatisfied workers are more likely to be absent from their job, terminate their employment, and be involved in industrial disputes. Other research into the consequences of job satisfaction, though less consistent, suggests that dissatisfied workers are also more likely to: have higher accident rates, be less productive, be more prone to

physical and mental ill-health, be less satisfied with their life in general, and to have a shorter life expectancy. Given that many of these factors cost the New Zealand logging industry millions of dollars each year through lost wages, inefficient operations, and reduced export earnings, it is appropriate that the satisfaction level of New Zealand logging workers be examined.

Essentially, a worker's level of job satisfaction is determined by the interaction of the psychological and personal characteristics of the employee and their work environment. A major problem in research is that there are many factors which can affect job satisfaction with the importance of each varying from worker to worker. For some employees, having a good working relationship with co-workers might be important, while for others, greater opportunities for promotion and higher pay might be more significant. It is often because of individual differences that there is a lack of consistency in the findings from one research setting to another.

Job satisfaction should not be confused with the term morale or, more specifically, "industrial" morale. While job satisfaction is the result of an appraisal made by one person of his or her job and work situation, morale is the result of appraisals made by a group of people of its collective ability to achieve a common goal. Also, by virtue of its link with goal achievement, morale is more concerned with the future, while job satisfaction focuses on present and past experiences.

STUDY DETAILS

The purpose of this Report is to provide information about job satisfaction within the New Zealand logging industry. In particular, it will:

1. Identify those aspects of the job which cause loggers satisfaction or dissatisfaction;
2. Investigate whether differences in job satisfaction occur between regions and between the various logging jobs performed;
3. Examine the relationship between job satisfaction and the personal characteristics of loggers, such as age and length of service; and
4. Investigate the relationship between job satisfaction and the logger's intention to remain within the industry.

The data for the study were collected as part of the 1986/7 Logging Workforce Survey (Gaskin et al, 1987; Wilson et al, 1987) and is based on interviews with 202 loggers from the Bay of Plenty and 97 loggers from Northland.

Other attempts at measuring the job satisfaction of the New Zealand workforce are rare. Two studies are cited in this Report. The first is the 1980-1 Social Indicators Survey conducted by the Department of Statistics which measured the job satisfaction of a nationally representative sample of New Zealand workers (Department of Statistics, 1984). The second is a study of the factors which cause job satisfaction or dissatisfaction among New Zealand farm workers (Cant and Wood, 1968).

Job satisfaction was measured using the Job Descriptive Index (JDI) developed by Smith, Kendall and Hulin (1969). The JDI is used internationally and is a widely regarded method of measuring job satisfaction. The JDI measures a worker's satisfaction with five facets of their job - the work itself, supervision, pay, promotional opportunities, and co-workers. Each facet is measured on either a 9 or 18 item scale consisting of short descriptive phrases about their job. The subjects respond to each item with a "yes", "no" or "unsure", depending on how well the item describes their job. Responses denoting satisfaction are given a score of

three, responses denoting dissatisfaction are given a score of zero, while unsure responses receive a score of one. The scoring of the unsure responses closer to the dissatisfied responses was based on the developer's discovery that dissatisfied respondents give more unsure responses.

By summing the item scores for each scale, a single satisfaction score is obtained for each aspect of the job. For comparative purposes the scores on the 9-item scales (pay and promotions) are doubled, giving all the scales a common possible range of 0 to 54. A subject who is completely satisfied with a particular aspect of their job receives a score of 54, while a subject who is completely dissatisfied receives a score of 0.

Because most loggers recognise two supervisors - the gang boss or "on-site" supervisor and the Company or "off-site" supervisor - their satisfaction with both was measured.

FINDINGS

Table 1 presents the mean, range and correlations between the six scales. As this table shows, loggers expressed greatest satisfaction with their on-site supervisor and co-workers, with mean scores of 41.2 and 40.2, respectively. These were followed by satisfaction with their off-site supervisor (32.6), the work itself (29.9) and their pay (29.3). Least satisfaction was expressed with their perceived promotional opportunities (24.0).

The positive relationship between the six scales suggests that loggers who are satisfied with one aspect of their job, tend also to be satisfied with the other aspects. However, the correlations were sufficiently low to suggest that the respondents were able to differentiate between these six facets of their job.

The 1980-81 Social Indicators Survey (Department of Statistics, 1984) also measured satisfaction with these same job aspects. Although this survey used a different method of measuring job satisfaction, comparisons are possible by categorising loggers with a score of 19 or more as "satisfied", loggers with a score of 18 as "indifferent", and loggers with a score of 17 or less as "dissatisfied".

TABLE 1 : MEANS, RANGES AND INTERCORRELATIONS OF JDI SCALES

FACET	MEAN	RANGE	INTERCORRELATIONS					
			1	2	3	4	5	6
1. Work	29.9	3-54	-					
2. Pay	29.3	0-54	.15	-				
3. Promotions	24.0	0-54	.34	.24	-			
4. On-Site Supervision	41.2	14-54	.20	.10	.24	-		
5. Off-Site Supervision	32.6	4-54	.11	.11	.07	.10	-	
6. Co-workers	40.2	8-54	.17	.12	.25	.22	.04	-

Table 2 shows the percentage of respondents who fell within each of these three categories for both the Logging Workforce Survey (LWS) and the Social Indicators Survey (SIS). This data suggests that job satisfaction within the logging industry is similar to the rest of the New Zealand male workforce with respect to the work itself, promotions, immediate supervision, and co-workers. It would appear, however, that loggers are more dissatisfied with their pay and promotional opportunities.

REGIONAL DIFFERENCES

Figure 1 presents the means of the six JDI scales for both Bay of Plenty and Northland loggers. The analysis reveals that Northland loggers are significantly more satisfied with the work itself and their promotional opportunities. The observed differences shown for the other job aspects were not statistically significant.

TABLE 2 : PERCENTAGE OF RESPONDENTS SATISFIED, INDIFFERENT AND DISSATISFIED

FACET	% SATISFIED		% INDIFFERENT		% DISSATISFIED	
	LWS	SIS	LWS	SIS	LWS	SIS
Work	93.7	90.0	0.7	5.0	5.6	5.0
Pay	67.8	83.0	8.2	3.0	24.0	14.0
Promotions	56.7	56.0	18.0	26.0	25.7	14.0
On-Site Supervision	95.9	90.0	2.9	4.0	1.2	4.0
Off-Site Supervision	72.7	N/A	18.2	N/A	9.1	N/A
Co-Workers	94.5	94.0	4.0	3.0	1.5	1.0

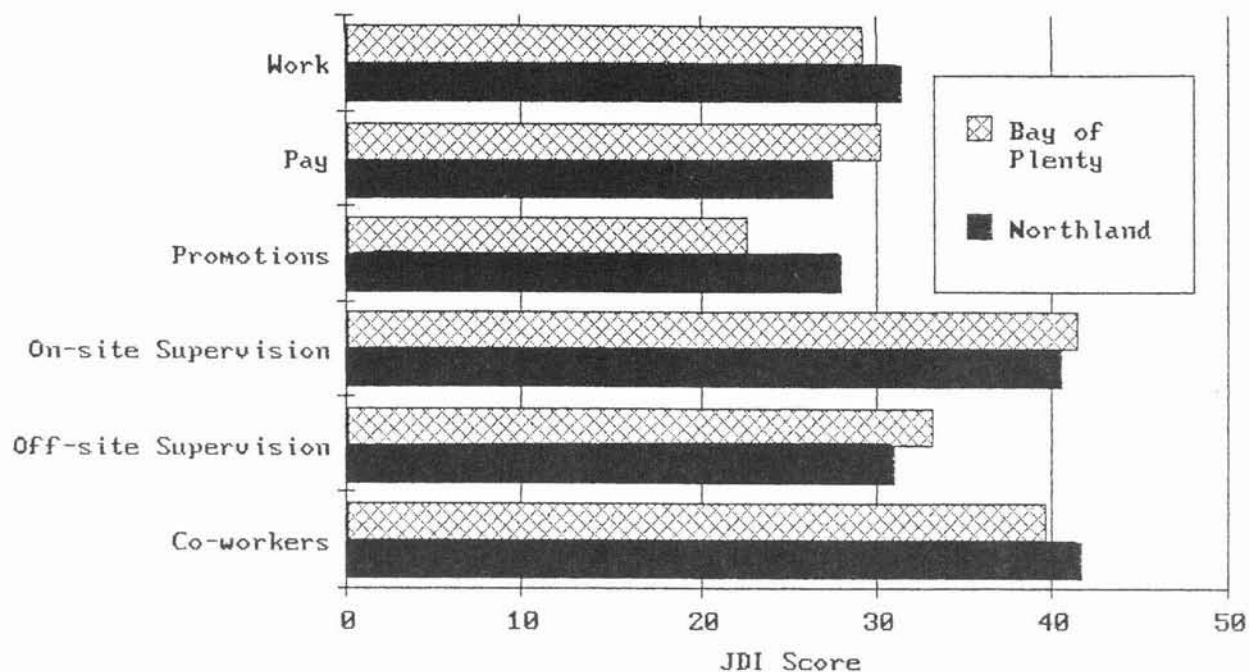


Figure 1 - Regional Job Satisfaction Scores

JOB DIFFERENCES

No significant differences in the levels of job satisfaction were found between the eight main logging jobs; felling, trimming, breaking out, skid work, skidder operating, tractor operating, loader operating, and hauler operating. There was, however, a tendency for machine operators to be more satisfied with their off-site supervisors.

An interesting finding was that loggers whose normal job involved both felling and trimming were less satisfied with their on-site supervisor, promotions, and co-workers than loggers who performed only one of these jobs.

EMPLOYEE DIFFERENCES

As discussed earlier, research findings have generally shown that employees differ in their values, needs and expectations of their job. While it is true that most employees will consider pay to be important, the importance attached to other facets of the job are not quite so clear. For example, employees with family responsibilities will often place a higher value on job security, while highly educated employees tend to be more concerned with a job's promotional opportunities and challenge.

Data from the Logging Workforce Survey was collected over a wide range of employee characteristics. This Report, however, will focus only on those more frequently researched in studies of job satisfaction, such as length of service, age, marital status, number of dependent children and education.

Length of Service

Most research findings have found that job satisfaction increases with length of service. The usual explanation is that longer-serving employees are more likely to have reached a satisfactory level of pay, cultivated positive co-worker relations, and gained status and seniority. Also, job expectations are likely to be more realistic as tenure increases, and research suggests that dissatisfaction is more likely to result when there is a large discrepancy between what an employee expects from a job and what it actually provides.

The present study suggests that the time worked in the logging industry has not influenced the logger's level of job satisfaction. However, analysis of the time worked in the present gang reveals that longer-serving gang members are more satisfied with their off-site supervisor and promotional opportunities than shorter-serving members.

Age

Research findings generally report that older workers exhibit greater job satisfaction than younger workers, particularly when the comparisons are made between under 30 and over 30 year olds. Since age and length of service are clearly related, many of the explanations given for length of service also apply to age. Certainly, older employees are more likely to have settled on a job that is compatible with their needs.

Data from the present study suggests that age plays only a minor part in explaining the level of job satisfaction of loggers. The only difference occurred with respect to the loggers satisfaction with their pay, where it was found that younger loggers tended to be more satisfied than older loggers.

Marital Status and Number of Dependent Children

Most studies report no relationship between job satisfaction and marital status or the number of dependant children.

Data from the present study found no differences in job satisfaction on any of the JDI scales between married and single loggers. There was, however, a tendency for loggers with two or more children to be less satisfied with their promotional opportunities.

Education

Research suggests that job satisfaction decreases with increasing education. The explanation usually offered is that better educated employees are less satisfied with routine jobs than lesser educated employees. Research in this area, however, is typically based on subjects with a wide range of educational levels, from a wide cross-section of occupations. It was expected that no differences would be evident in the present study where the subjects are all employed in the same industry and share a similar educational background.

Data from the present study largely supports this view, as differences were only found with respect to the loggers satisfaction with their pay. Specifically, loggers with one year or less secondary schooling were more satisfied with their pay than loggers with two or more years of secondary schooling.

RETENTION

During the course of the interview, the respondents were asked if they would still be working in the logging industry in five years time. Of the 299 interviewed, 154 stated that they would, 55 stated that they would not, and 90 were not sure.

This section investigates whether there are differences in the level of job satisfaction between respondents whose stated intention was to leave the industry and those whose stated intention was to remain. While it is accepted that one's intentions will not always result in actual behaviour, many researchers have noted a strong link between an employees stated intention to leave a job, and their subsequent turnover.

Figure 2 shows the mean scores for each of the six job satisfaction scales for loggers whose intention it was to remain in the industry and those whose intention it was to leave. The analysis reveals that loggers who plan to leave the industry over the next 5 years were significantly more dissatisfied with the work, their promotional opportunities, and their pay. There was also a tendency for those intending to leave the industry to be more dissatisfied with their on-site supervision.

CAUSES OF JOB DISSATISFACTION

Given that previous research has established a clear link between an employee's stated intention to leave a job and their actual turnover, it is desirable to analyse more closely the responses given to the various items contained on the JDI scales.

Dissatisfaction with the Work Itself

Dissatisfaction with the work itself is clearly related to the physically demanding nature of logging work. The majority of the loggers interviewed considered the work to be "hot", "tiresome", "endless", and "on your feet". Interestingly, these views were found not to be related to the respondents age or the job performed. It would appear, however, that these attributes were not seen as being detrimental to their physical well-being, as an overwhelming 91% of the respondents regarded logging work as "healthy".

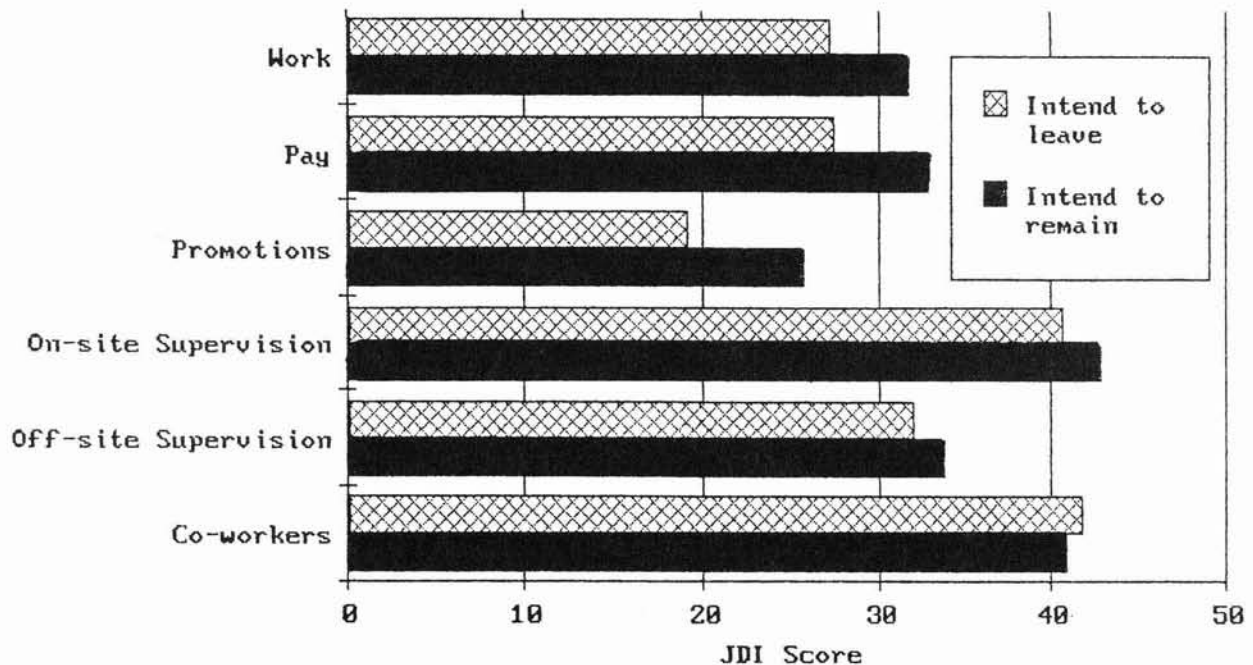


Figure 2 - JDI Scores by Loggers Intentions About Their Future in Logging

Dissatisfaction with Pay

While it was not surprising to find that higher paid loggers tended to be more satisfied with their pay than lower paid loggers, it would appear that dissatisfaction with pay is not so much related to the actual amount received, but rather to the fact the respondents felt they were worth more. Only 18% considered that their pay was "bad", while 53% considered it was "less than I deserved". The majority of the respondents thought their pay was adequate for normal expenses and enough to live on.

Dissatisfaction with Promotions

The data suggest that dissatisfaction with promotional opportunities is not related to any unfairness within the system (only 18% considered the gang's promotion policies were unfair), but rather that promotions were limited and irregular. Given this, it was somewhat surprising to discover that only 28% of the loggers interviewed regarded their job as "dead-end".

Dissatisfaction with Supervision

While the study shows that the vast majority of loggers are satisfied with their supervisors, particularly their on-site

supervisor, it would appear that satisfaction for some could be further improved by a move toward a more participative style of leadership. About one-third of the respondents claimed that their supervisor did not ask their advice.

Dissatisfaction with Co-Workers

Although respondents were generally satisfied with their co-workers, any dissatisfaction would appear to stem from differences in mutual interests rather than from on-site antagonism.

DISCUSSION AND CONCLUSIONS

This study measured the satisfaction that logging workers from the Bay of Plenty and Northland derive from six aspects of their job; the work itself, on-site supervision, off-site supervision, pay, promotions and co-workers.

The findings suggest that while the respondents were generally satisfied with these job aspects, some characteristics of the job provided considerably more satisfaction than others. Greatest satisfaction was expressed with their immediate supervisor (gang boss) and co-workers (i.e. the "social aspects" of the

work environment). These were followed by satisfaction with their off-site supervision, the work itself, and pay. Least satisfaction was expressed with their perceived promotional opportunities. Comparing this information with that provided by the Social Indicators Survey suggests that logging workers are more dissatisfied with their pay and promotions than the remainder of the New Zealand male workforce. The data also shows that job satisfaction within the logging industry is not related to the job performed.

Few differences were found in the relationships between job satisfaction and the individual differences of the loggers studied. Where differences did occur, they were generally consistent with previous research and showed job satisfaction increasing with length of service, and decreasing with education. Pay, however, was one area where the findings differed from other research in that younger loggers tended to be more satisfied with their pay than older loggers. The present study indicates that loggers with two or more dependant children are less satisfied with their promotional opportunities.

Like previous research, this study found that respondents who were more satisfied with their job were less likely to have intentions of leaving than respondents who were not so satisfied. Specifically, those loggers whose stated intention it was to leave the industry over the next five years were significantly more dissatisfied with their work, promotions and pay. Furthermore, there was a tendency for those employees to also be more dissatisfied with their on-site supervision.

Further analysis of the data from the survey suggests that job dissatisfaction in the New Zealand logging industry is linked to:

- the physically demanding nature of the work;
- a discrepancy between the pay received by loggers and the pay they feel they deserve;
- the perception that promotional opportunities are limited and irregular;
- the feeling that the supervision style does not allow for worker involvement in decision-making; and
- differences in the mutual interests of co-workers.

Finally, the role that good interpersonal relations play in providing an effective work environment should not be under-estimated. For example, Cant and Woods (1968) found the human relations aspects of management to be the single most important factor in determining the job satisfaction of New Zealand farm workers. While it is accepted that people may refrain from making negative responses in contexts where it is politic not to be critical, e.g. supervisors and co-workers (Bell and Weaver, 1987), the high levels of satisfaction expressed with the "social aspects" of the job environment would appear to be an essential attribute in an industry where productive effectiveness is so dependant upon the concerted efforts of small work groups.

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