The Effects of Productivity Enhancement: Some Community Views

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Abstract

The need to improve workplace performance and productivity is a commonly expressed view. This paper reports on community perception of productivity. It suggests that workers' negative perceptions regarding a distribution of the benefits of productivity may act as a barrier to productivity enhancement.

1. Introduction

Leaders of business (Confederation of Australian Industry Industrial Council 1987, p. 12), unions (Confederation of Australian Industry and Australian Council of Trade Union, 1988, p. iv) and government (Department of Employment and Industrial Relations, 1986:33) in Australia have all supported the need for improved workforce efficiency and productivity. There

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also seems to be considerable community interest in productivity.

For example, seventy seven per cent of respondents in a recent Western Australian survey indicated that productivity was an important issue, while only 3 per cent suggested it was unimportant (Benjamin, 1989 p. 3).

Support has also been reinforced by the formal industrial relations system. In 1987 the Australian Industrial Relations Commission (formally the Conciliation and Arbitration Commission) introduced the "restructuring and efficiency principle". Within this system, "increases in pay or improvement in conditions of employment were to be negotiated in exchange for measures designed to increase efficiency or promote restructuring" (Petridis, 1988 p. 156). This support was given a further boost in the 1988 National Wage Case Decision with the introduction of the "Structural Efficiency Principle". The emphasis was to improve productivity by trying to remove industrial obstacles, be they management or shopfloor practices.

However, there has been little attempt to understand the community's views about these issues and how people are likely to react to suggested changes. Such an approach may be unwise as, without the support of the community or the workforce, the idea of improving productivity will remain just an idea. Without understanding the community's attitudes and willingness to participate, any leader or government will have trouble selling the concept.

The present paper attempts to provide such information by reporting the results of a community survey which among other things, measured respondents' views about productivity. The following sections of the paper outline the study undertaken for this purpose, the sample and data selected, the analysis undertaken and the results obtained.

2. The Present Study

2.1 Sample selected

The sample used in the study was a general community sample, drawn randomly from metropolitan Perth. A random area cluster sampling technique was used to initially select dwelling units. Only one person, chosen randomly and aged 18 or over, was interviewed in each household. If the person chosen was not at home a recall was made and, if after this there was still no response, or there was a refusal to answer, a new household was chosen by taking the nearest house to the right of the non-response house. Because of the range and sensitivity of some of the issues raised and the

need to obtain a random sample of adults, a structured personal interview was felt to be the only practical approach to data collection. The structured interviews were personally conducted by a trained field interviewers who had attended a seminar on the purposes of the questionnaire before undertaking the data collection. The number of contacts made was 510, with 400 usable questionnaires being obtained, resulting in a response rate of 78 per cent, which is high for the type of data collection method used.

2.2 Questionnaire formation

The questions were formulated and the content validity of the instrument was determined, using a method recommended by Sax (1968, p. 168). A group of eight specialists examined each item of the instrument to see that no item contained volcabulary above the level of difficulty for grade seven schoolchildren and that the items were focused on effects of productivity enhancement in general and not on a specific industry.

A total of 24 questions, which are outlined in Table 3, were obtained from this process and respondents were asked to agree or disagree with each statement using a 5 point Likert type scale, ranging from Strongly Disagree (1) to Strongly Agree (5). Three questions about repondents' perceptions of the workforce's capacity to improve productivity, outlined in Table 1, were also collected as was a series of traditionally collected background data (e.g. age, gender and education) and information on respondents' workforce and union experience. The results obtained from analysing the data collected are outlined in the next section.

3. Results Obtained

3.1 Demographic data

Males comprised just over half the sample (51 per cent) and the sample had a median age of 30-34 years. Just over two thirds were married (69 per cent) and nearly the same number were Australian born (63 per cent). The next largest group were born in the United Kingdom and Ireland (20 per cent) while another 6 per cent were born in other European countries. Even though approximately one in six of the respondents were born in countries other than Australia or the United Kingdom and Ireland, over nine out of ten (96 per cent) of respondents came from homes where English was the major language. The average length of time in Australia for non-Australian born respondents was 18 years, ranging from less than 1 year to 65 years.

The highest education level of the respondents varied. However, over a third (39 per cent) of the sample had three years or less at high school while 22 per cent had graduated from a TAFE or a Tertiary Institution.

Only 28 per cent of respondents were currently members of trade unions while, of those who were not presently members, 46 per cent had been members at some time in the past. Past and present members of the union movement indicated some satisfaction with their union in obtaining better wages and working conditions, with nearly half (47 per cent) indicating such satisfaction. There was a slightly higher level of satisfaction with current and past employer's willingness to provide better wages and working conditions as over half of the sample (56 per cent) indicated such satisfaction.

3.2 Responses to Productivity questions

Respondents were initially asked how much they felt various groups could improve their productivity. The results obtained are shown in Table 1. As can be seen from the table, respondents generally felt that some improvement was possible at all levels. However, they were generally convinced that those parts of the workforce further from them could improve productivity more than those closer to them.

Table 1. Ability to Improve Productivity

Statement 1		2	3	4	5
Do you think you could improve your productivity at work?	13.5	17.9	12.4	33.2	23.0
Do you think your colleagues could improve their productivity?	6.4	13.3	10.9	38.1	31.3
Do you think the workforce as a whole in Western Australia can improve its productivity?	0.5	0.8	6.6	36.1	56.0

Measured on a 5 point Likert Scale (1) Definitely not (2) Probably Not (3) Uncertain (4) Probably Yes (5) Definitely Yes

T-tests suggested the observed differences were statistically significant in each case, with the move to the workforce as a whole somewhat greater than the move to the immediate work group (t-statistics were 7.80 and 12.89 respectively). This view suggests most people felt they were working

relatively well but that others might not be, a view government, unions and management will have to overcome if productivity improvement programmes are to be effective.

Further, as can be seen from Table 2, people directly involved in the enterprise are held to be most responsible for improving organisational productivity. Four out of five of the sample ranked management as either the most or second most important group in this process, while four out of ten ranked workers in the organisation in the same categories.

Table 2.	Responsibility	to increase	Productivity in	an organisation
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Groups	Rank 1	Rank 2	% Rank 3	Rank 4
State Government	4.3	4.3	4.0	5.8
Federal Government	4.0	2.5	3.0	4.0
Union leaders	4.3	11.0	15.0	22.8
Shop-floor representatives	3.3	19.0	29.3	12.0
Workers in the organisation	18.0	32.3	18.8	17.5
Management of the organisation	60.3	20.0	10.0	2.5
Shareholders of the organisation	2.3	7.3	5.5	10.5
Employers Association	2.5	2.5	8.0	15.0
Industrial Tribunals	1.0	1.0	5.5	8.5

The respondents were asked to rank the 4 most important groups with (1) the most important (some respondents ranked some groups with equal importance).

Trade union leaders, both full-time and lay, were also seen to have some responsibility while employer associations and shareholders were felt to be only peripherally involved. Governments were thought to have little responsibility for increased organisational productivity. It appears that respondents generally felt the management of the organisation was the most responsible groups, followed by workers in the organisation, shopfloor union representatives and union leaders.

Respondents were also asked to respond to a set of 24 questions which tapped a variety of aspects of productivity. The results obtained are outlined in Table 3.

It seems respondents expect improved productivity to yield better returns to shareholders (80% of respondents agree compared to 2% who disagree) and managers (57% agree compared to 10% who disagree) than to yield

Table 3.	Attitudes to	Productivity
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Table 6. Attitudes to Freducti					·	
ltem	1 1	2	3	4	5	Mean
Workers will have to work more efficiently	1.8	4.2	18.0	38.8	37.2	4.055
2 Workers will have to work more flexible hours	7.5	11.3	28.0	32.2	21.0	3.480
3 Workers and management w have to co-operate more	0.8	1.7	5.8	28.2	63.5	4.520
4 Workers will have to work harder	3.3	10.0	25.7	37.8	23.2	3.768
5 Firms need more up-to-date plant and equipment	2.3	7.7	33.5	33.8	22.7	3.670
6 Workers need to be better trained	1.5	2.0	16.0	40.8	39.7	4.153
7 Better management would improve productivity of an organisation	0.8	3.0	9.5	36.2	50.5	4.328
8 Workers will have to work smarter	4.0	8.8	25.7	37.8	23.7	3.685
Most West Australian organisations could easily increase their productivity.	1.8	6.0	30.2	35.8	26.2	3.788
10 Workers will bear most of the costs of improved productivity	19.5	29.8	32.0	15.2	3.5	2.535
11 Increases in organisation productivity will lead to job losses.	27.8	25.5	21.7	20.3	4.7	2.488
12 Increases in productivity will lead to lower prices to customers	8.8	22.5	29.0	24.0	15.7	3.155
13 Increases in productivity will lead to higher wages for the shop-floor workers	5.5	22.0	32.5	29.8	10.2	3.173
14 Increases in productivity will lead to better dividends for the shareholders	1.0	1.0	18.8	42.5	36.7	4.130
15 Increases in productivity will lead to better compensation packages for management	3.8	6.5	33.1	34.5	22.1	3.647

Table 3 (cont)

ltem	1	2	3	4	5	Mean
16 Increases in productivity will lead to shorter hours for the shop-floor workers	14.5	33.5	30.5	19.5	2.0	2.610
17 Increase in productivity will lead to better working conditions	4.3	19.2	37.8	29.2	13.5	3.325
18 Giving workers a say in how the organisation is run will help to increase productivity	1.5	4.0	10.3	39.2	45.0	4.223
19 Increases in productivity will lead to improved training opportunities for workers	1.8	7.5	32.0	36.5	22.0	3.700
20 Increases in productivity will lead to poorer occupational health and safety	32.3	27.7	26.3	11.2	2.5	2.240
21 Increases in productivity will lead to fewer				45.0	•	2245
industrial disputes. 22 Increases in productivity will lead to better quality goods/services for customers	3.3	28.2 15.0	36.5	15.8 34.5	17.0	2.815 3.470
23 Increases in productivity will create more problems for older workers than younger workers	12.8	23.2	26.3	28.2	9.5	2.985
24 Increased productivity will be achieved more by changing shop-floor workers' activities than management activities	14.8	30.5	32.2	16.8	5.7	2.683

The items were measured on a 5 point Likert scale with (1) strongly disagree and (5) strongly agree.

higher wage for shop-floor workers (40% agree compared to 27% who disagree). This suggests a major problem for productivity proponents as workers, who are a major stakeholder group (ranked second in responsibility for productivity improvement), are not expected to gain very much and may well feel disinclined to assist. This negative feeling about likely gains

to the shop-floor workers was further highlighted as just over 60% of the sample who believed workers would have to work harder to improve productivity. It is unlikely most workers will be very willing to work harder without some immediate reward. Many who support the concept of productivity argue workers need not work harder but, rather, can work smarter or more efficiently. A majority of the sample (76% and 62% respectively) agree there is some truth in these arguments. Nevertheless, most also also expect work will be "harder" and some effort may well be needed to change such attitudes.

Forty per cent of respondents believed increased productivity would lead to lower prices for customers (31% disagreed), while just over half (52%) expected productivity improvement to produce better quality goods and services. The latter might be seen as the returns to customers, who are a third stakeholder group, suggesting most respondents expected managers and shareholders were the stakeholder group that would gain most from such programmes. While workers were felt to have a major responsibility for increasing productivity, shareholders, who were not perceived to have such responsibilities, were expected to be the real beneficiaries of improved productivity.

Concerns about workers' returns were also evident in that only one in five respondents believed that productivity increases would lead to shorter working hours. However, more intrinsic rewards, such as improved working conditions and better training opportunities, were expected by 43% and 59% of the sample respectively. The community seems to expect that management is more likely to offer the benefits of improved productivity indirectly to workers rather than through the wage packet. Whether this will be acceptable to the workforce remains an interesting point.

In this study nearly one in five respondents believed workers would have to bear most of the costs of improved productivity, while one in four believed that job losses would occur and four out of ten suggested that productivity enhancement would create problems for older workers. These findings support earlier concerns about likely negative workforce reaction. This ambivalence and concern about the effects of productivity improvement was also evident in respondents' idea about what productivity meant, which was asked as an open ended question within the survey. As can be een from Table 4, there was a wide range of opinions.

The community has a variety of meanings for the term "productivity", ranging from terms describing it as greater production and/or better quality, to terms describing the concept as a scam or as a cause of people losing their jobs. There were clearly some negative feelings towards the concept, shown in the view that workers may not get their "fair" share of the process or may have to bear a disproportionate share of the costs involved.

Table 4. Respondent's Definitions of Productivity

Statement	Per cent
Not sure/Do not know	7.4
Job done correctly and on time	2.6
Increased production at same cost	13.6
Doing the job	5.6
Producing goods and services	7.9
Higher profits for employer	2.8
Fair days work for a fair days pay	9.5
Increased efficiency and output (workers	12.8
Amount and quality of work	14.3
Work achieved over specified period	11.8
Meeting employers expectations	8,0
Adequate staff, adequately trained and paid	0.3
Better pay	0.8
Production exceeding costs	1.5
Harmony between employers and employees	0.5
Most efficient production for minimum cost and time	3.3
Longer working hours/increased work load	0.7
More work less pay	0.5
High standard of production under Health and Safety Act	0.3
Work benefiting the community	0.3
Job satisfaction	1.0
Its a scam	0.3
Bonuses for increased productivity	0.5
Being employed	0.3
More work equals more money	0.3
Increased productivity means no work for others	0.3

Respondents were also asked what percentage of productivity improvements should go to the three stakeholder groups. The results obtained are shown in Table 5. The means scores were 38% for managers/shareholders, 34% for workers and 28% for customers. These differences in suggested rewards were also evident in that 31% of the sample believed management/shareholders should get 50% or more of the rewards, while 18% thought workers should receive such a split but only 9% thought customers should do so. The community felt that managers/ shareholders should (and probably would) benefit most from productivity improvement but that workers and, to a lesser extent, customers should also get some benefit.

Percentage Managers/ shareholders* Workers* Customer 0 - 0.3 - 10 2.6 4.6 10.0 20 8.5 11.5 29.8 30 31.4 47.1 65.9 40 68.3 82.1 90.5 50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7 100 100.0 100.0 100.0				
0 - 0.3 - 10 2.6 4.6 10.0 20 8.5 11.5 29.8 30 31.4 47.1 65.9 40 68.3 82.1 90.5 50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	Percentage	Managers/	Workers*	Customers*
10 2.6 4.6 10.0 20 8.5 11.5 29.8 30 31.4 47.1 65.9 40 68.3 82.1 90.5 50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7		shareholders*		
20 8.5 11.5 29.8 30 31.4 47.1 65.9 40 68.3 82.1 90.5 50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	0	-	0.3	-
30 31.4 47.1 65.9 40 68.3 82.1 90.5 50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	10	2.6	4.6	10.0
40 68.3 82.1 90.5 50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	20	8.5	11.5	29.8
50 87.4 96.2 97.0 60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	30	31.4	47.1	65.9
60 94.8 97.4 98.4 70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	40	68.3	82.1	90.5
70 97.2 97.7 98.9 80 98.7 98.5 99.5 90 99.5 98.7 99.7	50	87.4	96.2	97.0
80 98.7 98.5 99.5 90 99.5 98.7 99.7	60	94.8	97.4	98.4
90 99.5 98.7 99.7	70	97.2	97.7	98.9
	80	98.7	98.5	99.5
100 100.0 100.0 100.0	90	99.5	98.7	99.7
	100	100.0	100.0	100.0

Table 5. Split of Rewards caused by Productivity Enhancement

Table 6 gives the results of multivariate analysis utilising the three questions on the capacity of the system to improve the situation (shown in Table 1) as the dependent variables. A fuller discussion of this analysis is available from the authors.

Table 6. Regression Results: Capability of Increasing Productivity

Predictor Variables	В	Beta	Т	
Supervisor	-0.333	-0.212	-3.998	
Gender	0.341	0.197	3.775	
Age	-0.0613	-0.194	-3.751	
Trade Union Member Now	-0.201	-0.107	-2.019	
Worker Requirement	0.216	0.150	2.704	
Negative Outcomes	-0.112	-0.128	-2.424	
Constant	3.768		11.823	

4. Conclusions

From the results reported, it seems that the rewards for increasing productivity were felt to be more likely to lead to better dividends for shareholders and managers than the shop-floor workers in the organisation. Beside this feeling of a possible low return for increasing productivity for the worker, the community also believed that workers would have to work harder. It is unlikely that workers will improve their productivity if there is no immediate reward. This problem is further exacerbated because the sample believed workers had a large responsibility for increasing

These percentages are cumulative.

productivity in an organisation, while shareholders, who were not perceived to have such responsibility, appeared to be the likely beneficiaries of productivity enhancement programmes.

When a principal components analysis was conducted on the questions measuring the perceived effects of productivity enhancement programmes, five factors ["workers' outcomes", "management requirements", "negative outcomes", "workers' requirements" and "management/shareholders' outcomes"] were found. These factors, together with a number of other variables which measured personal, trade union history and work experience were subjected to a regression analysis with the perceived ability of the "system" to increase productivity as the dependent variable. The results indicated that males were more positive about the likelihood of increasing productivity, as were people who believed that workers would have to change their work behaviour and work harder, smarter and more efficiently. As might be expected people who expected less negative outcomes were also more positive about peoples' ability to increase productivity. It seems that those who perceive outcomes could be negative expect workers may not be willing or be unable to increase productivity.

Political, union and industrial leaders must make an effort to convince such workers of the benefits of improved productivity and that the rewards for such efforts will be equitably distributed among all of the stakeholder groups. While there is some support for productivity improvement, the idea is far from universally accepted and needs appropriate.

Bibliography

Benjamin, C., (1989), "Report on Attitudes to Productivity", *Productivity Policy Unit*, Government of Western Australia, Productivity Information Series No.3.

Confederation of Australian Industry Industrial Council, (1987), *Employee Participation: A Guide to Realising Employee Potential and Commitment*, Confederation of Australian Industry, Melbourne.

Confederation of Australian Industry and Australian Council of Trade Unions, (1988), *Joint Statement on Participative Practices*, Melbourne.

Department of Employment and Industrial Relations, (1986), *Industrial Democracy* and Employee Participation: A Policy Discussion Paper, Australian Government Publishing Service, Canberra.

Everett, J.E. and Entriken, L.V., (1980), "Factor Comparability and the Advantages of Multiple Group Factor Analysis", *Mutivariate Behavioral Research*, Vol.2, 165-180.

Petridis, A., (1988), "Wages Policy and Wage Determination in 1987", *Journal of Industrial Relations*, Vol.30, No.1, pp.155-162.

Sax, G., (1968), Empirical Foundations of Educational Research, Englewood Cliffs, New Jersey, Prentice Hall.