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The Effect of Information Sharing on Empowerment in Indonesia

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Abstract

This study examines the differences in information sharing and psychological empowerment in organisations, as well as the relationship of both. Using multiple case study research in four manufacturing companies in Indonesia, this study found that the levels and the relationships are different across the companies studied. The differences are explained by the extensiveness use of empowering initiatives and the contextual factors surrounding the companies. The limitations of the universal measures of information and empowerment are also discussed..

1. Introduction

This paper is a part of a wider study about empowerment theory and practices in Indonesia. Empowerment has been extensively studied and it might be the most popular term used across disciplines in the 1990s. This paper focuses on the relationship between information sharing – which is regarded as a part of structural empowerment - and psychological empowerment.

The relationship between information sharing and empowerment is well supported in management literature. To empower organisations it is believed that more information should be available to more people at more levels through more devices. Such information might include data about workflow, productivity, external environment, competition, and firm strategy. According to Bowen and Lawler (1992), there are two specific pieces of information, which are critical to empowerment: (1) information about organisation's mission and (2) information about performance of a work unit Spreitzer (1995, 1996) shows that access to information is significantly related to empowerment. Individuals who perceive that they have a high degree of access to information report a higher level of empowerment than those who perceive they have less access to information.

Additionally, the effects of empowerment on organisational performance are widely recognised. Empowerment is believed as mediator for performance by many writers such as Spreitzer (1995), Spreitzer et al (1997), Spreitzer et al (1999), Fuller et al (1999), Koberg et al (1999), and Kraimer et al (1999).

This paper aims to examine (1) the variations of information sharing and psychological empowerment, and (2) the effect of information sharing on psychological empowerment in four manufacturing companies in Indonesia.

2. Methods

This study used multiple case study research. There were four cases selected from the manufacturing sector in Indonesia. As a case study research, the cases were not selected on the basis of statistical sampling, but it used the principle of maximum variation by including companies from different industrial sectors and different technologies. The four companies were Food-Co, Stel-Co, Chem-Co, and Wood-Co (the names are disguised).

A combination of data collection methods was used in this study. This combination or triangulation was expected to be highly synergistic (Yin, 1994). The multiple data collection methods were used including: (1) interviews and (2) questionnaires.

Mainly semi-structured interview was used because it would make the interview move freely and more conversational but the focus on predetermined questions were able to be maintained. The questions were open-ended to allow respondents to say freely whatever they wanted to say. To achieve this, some interview guides were developed. All interviews were recorded and transcribed. The interviews were conducted with (a) senior managers and (d) employees. Senior manager expected to involve was senior human resource manager since he/she was the person responsible for the issues. The employees were asked about their perception of empowerment and information sharing. The interviews were conducted in order to yield more information than could be obtained from the questionnaire.

Questionnaires were used to obtain quantitative data on information sharing and psychological empowerment. The number of participating respondents depended on the number of employees occupying supervisory levels (below managerial levels) in the companies. There was no sampling taken since the questionnaire distributed to all employees at the levels. The questionnaire consists of questions about psychological empowerment and information sharing. The detail of each questionnaire is described below.

Information sharing. Information sharing is concerned with the amount and type of information that is shared with employees. The measure is also borrowed from Lawler et al (1995). Employees were asked about the information they receive consisting 8 (eight) types of information, that are the corporation's overall performance, the plant's overall performance, the department's performance, their own individual performance, the plant's business plans and goals, the corporation's business plans and goals, new technologies that affect them, and the competitors' relative performance. The typical questions, for example, are 'I receive information about the corporation's overall results', 'I receive information about the plant's overall performance', etc. Employees were asked to place a checkmark to the statements they believe true in the company. In the analysis, the information sharing is calculated by averaging the number of the types of information the employees receive.

Psychological empowerment. To measure this aspect, Spreitzer's questionnaire, which has been widely used in measuring psychological empowerment, was employed. Because it has been widely accepted, Spreitzer's construct has proved its validity and reliability in much research in the field of organisational behaviour. Even though there are many criticisms of this concept, there is a lack of alternative concepts that have been validated empirically. The more comprehensive measure is difficult to develop and it is realised by its critics such as Zimmerman (1995, 2000). The weaknesses of this construct for not including interpersonal and behavioural components can be handled by including the structural dimension of empowerment, which will be described later.

Spreitzer's questionnaire measures psychological empowerment including senses of meaning, competence, self-determination, and impact. The definitions of each component, as discussed in previous chapter, are as follows:

- Meaning is defined as the value of a work goal or purpose, judged in relation to an individual's own ideals and standards.
- Competence or self-efficacy is the self-belief that one possesses the skills and abilities necessary to perform a job or task well.
- Self-determination is an individual sense of having choice in initiating and regulating actions or a feeling of having control over one's own work.
- Impact is the belief that one has significant influence over strategic, administrative, or operational outcomes at work (Spreitzer, 1995).

Based on the definitions, Spreitzer's questionnaire composes 12 (twelve) questions in 7-point Likert scale.

The characteristic of the company, the number of questionnaire distributed, and the number of people interviewed can be seen in Table 1 below.

Table 1. Summary of the fieldwork

	Food-Co	Steel-Co	Chem-Co	Wood-Co
Product	Wheat Flour	Steel plate	PTA*)	Plywood
No. of employees	2,268	255	587	3,909
No. of middle managers in production dept.	107	26	52	119
Questionnaires distributed	107	26	52	119
Questionnaires received	69	26	40	108
Response rate	64%	100%	77%	91%
Senior managers interviewed	5	3	2	3
Operators interviewed	33	10	8	28

(in group)				

Analysis. The data was analysed using mean comparison and post hoc analysis to see the different among the cases. While the analysis within each case used correlation analysis. The qualitative data was used to enrich the finding and to give contextual sense to the quantitative analysis.

3. Results and Discussion

The discussion of the results will begin by analysing the difference in the levels of information sharing and psychological empowerment; and is then followed by discussing the relationship between information sharing and psychological empowerment.

The levels of information sharing across the companies are significantly different. Food-Co has the highest information sharing index among the cases (see Table 2). Statistically Food-Co is the highest and significantly different from Chem-Co and Wood-Co, while Steel-Co is in-between and indifferent from either Food-Co or Chem-Co and Wood-Co. Food-Co is clearly the highest since it employs various participation initiatives especially TQM. A great range of quality and productivity information is publicly given. The channels include quality circles, quality ceremony, and related activities. Steel-Co has a similar approach though not as extensive as Food-Co, but problems in implementing TQM inhibit the amount and the quality of information which may flow. The informal approach of the supervisors also contributes to the limited information sharing since informal communication tends to involve limited numbers of individuals. On the other hand, the strict control at Chem-Co and Wood-Co may explain the difference. While Wood-Co uses close supervision to control employees, Chem-Co adopts formal SOP controls. These types of control limit the flow of information in the companies since this is usually under tight control. The statement of the human resource manager at Chem-Co, that information is deliberately controlled in order to make employees undisturbed, is an obvious example that information flow is strictly controlled in the company.

Table 2. Comparison of empowerment and information index across the companies

Index	F	S	C	W	Avg	Sig
Empowerment	5.05	5.10	4.81	4.68	4.91	**
• Meaning	5.75	5.71	5.51	5.46	5.60	
• Competence	5.46	5.59	5.43	5.12	5.40	*
• Choice	4.15	4.28	4.03	3.73	4.05	*
• Impact	4.85	4.83	4.28	4.43	4.60	**

Information	0.63	0.56	0.50	0.51	0.55	*

Note: F=Food-Co, S=Steel-Co, C=Chem-Co, W=Wood-Co, Avg=Average

** the mean difference is significant at the .01 level (2-tailed).

* the mean difference is significant at the .05 level (2-tailed).

Even though there are differences in the information sharing index, we need to be alert to the use of the index. **First**, there is a common opinion across the cases that the type of information shared in the companies is generally generated for the management interest. The range of information listed, which is regarded as important information for empowerment, clearly serves the company's concern, not the workers'. The workers in almost every company studied complained that the information is given to make them work harder. The most common information received related to company problems (deviation of expected performance) and required the workers to improve the quality of their work. It seems that information was used selectively to enable managers to reduce negative divergences and exploit the positive divergences which individuals make. As Braverman (1974) says the prioritisation of information in the manager's role is the key to scientific management. Similarly Webster and Robins (1993) argue that information can be used to continue and extend the established control mechanisms. In similar vein, Marchington and Grugulis (2001) argue that information sharing is no more than a cascade of information from management to employees, which ignores the employee contribution. This one way information flow rather than being seen as empowering could more easily be interpreted instead as indoctrinating, emasculating, and controlling.

Second, the information index ignores the depth, usefulness, and quality of information given. Instead of the extensiveness, other important dimensions are not considered. For example, the type of corporate performance shared with employees could have different effects. The company could explain its performance to employees, yet hide some vital information in order to control employees' reactions; or use performance information such as decreasing profit or market share to make employees work harder.

Third, the information listed is based on an assumption that the practice is the best practice of information sharing for every organisation. For example, information about performance and competitor were used as the best proxy of information without considering the variety and the problematic implementation of such information in organisation.

In terms of psychological empowerment, all the cases show high levels of it. This can be seen in the empowerment scores which are in the neighbourhood of five (see Table 3). Food-Co and Steel-Co show higher scores than Wood-Co and Chem-Co. Statistically, there is a significant difference in overall psychological empowerment levels between the four companies. The post hoc test shows that Wood-Co's psychological empowerment level is significantly different from Steel-Co and Food-Co, while there is no significant different between Chem-Co, Steel-Co, and Food-Co. Thus, the difference is mainly because Wood-Co has the lowest scale.

Before discussing the relationships between information and psychological empowerment, there is an important finding that needs more attention. In each company, choice and impact are almost lower than meaning and competence dimensions. Choice and impact indices in each company are around four - (the choice index is 4.05 and the impact index is 4.60), while meaning and competence indices are always above five (the meaning index is 5.60 and the competence index is 5.40). This finding is similar to Spreitzer's (1995) surveys on different employee groups: mid-level managers, clerical workers, and front-line employees; Siegal and Gardner's (1999) study on employees in a manufacturing company; and Kraimer et al.'s (1999) survey on nursing professionals. This similar pattern to the dimensions of psychological empowerment creates some interesting questions for further exploration. First, though many studies support the existence of the four dimensions of empowerment, the choice and impact dimensions could be the most important measures when viewed from a structural perspective. Though the approach is psychological, this notion of psychological empowerment is originally conceptualised from the root of power and control construct of Conger and Kanungo (1988). Feelings of choice - which reflect autonomy or having control over ones' work - and feelings of impact - which indicate significant influences over strategic, administrative, or operational outcomes - are closer to structural perspectives of empowerment. Choice can be regarded as power potential while impact reflects actual power (Kraimer et al 1999). This note is important when we analyse the relationship between structural and psychological empowerment in the next section. Second, some studies also report that meaning and competence are distinct dimensions but choice/self-determination and impact can come together as one dimension (Fullford and Enz, 1995). Therefore, Wall, Wood, and Leach (2004) suggest further qualification for the measures as Spreitzer (1995) comments that the measures need continued refinements. Finally, there is a possibility that the dimensions are sequentially related. For example, choice can be a precursor of meaning while competence can be a precursor of impact.

It could be thought that information sharing might explain variations in psychological scales across the cases. However, the results show the effect of information is different across the cases. Information is the best predictor of psychological empowerment but the effect is significant only at Food-Co (see Table 3 below). Thus, the significant influence of information is clearly not universal. In certain circumstances, information significantly influences psychological empowerment but it does not in other circumstances.

There are some possible explanations of this finding. **First**, at Food-Co, the relationships are significant since psychological empowerment at Food-Co is at high level. It can be argued that information influences the feeling of empowerment when this is at a high level. In other words, information is relevant when individual has reached a certain level of psychological empowerment.

Table 3. Correlation between Information Sharing and Psychological Empowerment

Information sharing at	Psychological Empowerment (PE)				
	Meaning	Competence	Choice	Impact	Total
Food-Co		* *		*	*
Steel-Co					
Chem-Co					
Wood-Co				* *	

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

Second, since the relationship between information and psychological empowerment is not consistent, contextual factors might influence the links. The factors can be psychological, individual, and organisational. Therefore, contextual factors beyond the relationship need to be explored further. Spreitzer (1995) mentions a personality variable and individual difference factors such as self esteem and locus of control.

Third, one of the possible organisational factors is the extensiveness of Food-Co in using various involvement techniques. Food-Co has the most extensive empowerment climate and the organisational environment is supportive for psychological empowerment. While in other cases, the control climate dominated the environment at Chem-Co, Wood-Co, and Steel-Co. At Wood-Co, control is manifested in close personal supervision, while at Chem-Co it shows in standard operating procedures. Furthermore, closer analysis can be done by looking at which psychological dimensions are influenced by information. We find that at Food-Co competence and impact dimensions are significantly influenced by information. I argue that information about individual performance will influence the feeling of competence, while information about company or unit performance will influence the feeling of impact.

Fourth, the measures of both information and psychological empowerment might fail to reflect the complexity of information sharing and empowerment at the workplace. Information measure has considered the extensiveness of information issues and but not the degree of information shared, while psychological empowerment has only measure the cognitive intra-personal element of individual, while ignoring the inter-personal and behavioural elements (Zimmerman, 2000)

Fifth, the reality of information in organisation might contribute to the relationship given the facts that information sharing gives only limited information to employees. This study found employees were given information as a condition to make them work harder. Therefore, information is not genuinely intended to empower the workers. This finding supports some studies that doubt the impact of information (see Wagner, 1994).

Finally, I would argue that in certain circumstances the psychological empowerment construct is not relevant especially when the organisation has collective culture. Adapting the notion of collective-efficacy of Lam, Chen, and Schaubroek (2002) I suggest that the development of collective empowerment is more appropriate. As discussed before, Spreitzer's psychological empowerment is borrowed from self-efficacy, therefore it can be regarded as self-empowerment. In the Indonesian case, where collective culture is evident, the conception of collective-empowerment could be useful. For example, the relationship between information sharing and psychological empowerment at Wood-Co and Steel-Co – where the individual culture is more evident than at Food-Co - may be explained better if collective empowerment is used rather than self-empowerment.

4. Conclusions

The levels of information sharing and psychological empowerment were found different across the companies studied. The differences might be explained by the different structural initiatives like TQM employed by each organisation.

The relationship between information sharing and empowerment is not consistent in each case. Therefore, the universal effect of information sharing on empowerment is not confirmed. The contextual factors - in which information influencing psychological empowerment - need further analysis.

The more complete dimensions in measuring information sharing and psychological empowerment are argued able to give better understanding of both variables and their relationships.

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