

THE RELATIONSHIPS BETWEEN PERCEIVED ORGANIZATIONAL CLIMATE AND WORK MOTIVATION

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ABSTRAK

Kajian ini bertujuan mengkaji pertalian antara faktor-faktor suasana organisasi dan motivasi. Data-data diperolehi daripada 74 pekerja sebuah syarikat perkilangan yang besar. Melalui analisis faktor ke atas item-item suasana organisasi dan motivasi, 9 dimensi suasana organisasi dan 3 komponen motivasi dihasilkan. Hasil dari analisis korelasi menunjukkan bahawa beberapa dimensi suasana organisasi, seperti risiko dan konflik, ganjaran, identiti dan sokongan, mempunyai pertalian yang bererti dengan motivasi.

ABSTRACT

The purpose of this study was to examine the relationships among organizational climate factors and measures of motivation. Data were obtained from 74 employees of a large manufacturing company. Factor analyses of climate and motivation items yielded 9 climate dimensions and 3 motivation components. Correlation results indicated that certain dimensions of organizational climate such as risk and conflict, reward, identity, and support were significantly related to motivation.

INTRODUCTION

Considerable research evidence indicates that there are relationships between climate factors and measures of job satisfaction and job performance (Downey, Hellriegel and Slocum 1975; LaFollette and Sims 1975; Lawler, et al. 1974, Pritchard and Karasick 1973). However, relatively few studies have examined the relationship between organizational climate and work motivation. The present study attempts to examine relationships between various climate dimensions and components of the expectancy model of motivation. Our discussion begins with a brief review of the theoretical literature related to the two variables under study.

ORGANIZATIONAL CLIMATE

Numerous studies and literature have focussed on the topic of organizational climate. Its importance is partly due to its hypothesized relationship to other organizational phenomena including job satisfaction, job performance, leadership behaviors, and the quality of work group interaction (Schnake 1983).

Many of the climate studies have defined organizational climate in different ways. Forehand and Gilmer (1964), for example, refer to climate as a set of relatively enduring characteristics that describe an organization, distinguish it from other organizations, and influence the behavior of organizational members, while Litwin and Stringer (1968) see climate as a set of measurable properties of the work environment perceived by the people in it, and is assumed to influence motivation and behavior. By synthesizing the definitions of various researchers, Pritchard and Karasick (1973), defined organizational climate as a relatively enduring quality of an organization's internal environment which results from the behavior and policies of its members, is perceived by its members and acts as a source of pressure for directing activity. Steers (1977) speaks of the perceived characteristics found in the work environment that result largely from actions taken by the organization and that presumably affect subsequent behavior. In summary, organizational climate can be defined as employee's subjective perceptions of the work environment which are descriptive and these perceptions can lead to affective responses which govern employees' behavior.

Since organizational climate involves perceptions of an organization's environment, different organizations with their differing practices and procedures may have different climates (Muchinsky 1976). Several studies have tried to identify the specific factors in the work environment which seem to influence climate. Campbell et al. (1970) in a review of four studies identified 4 dimensions that seemed to be common to these studies: individual autonomy, structure, reward, and consideration, warmth, and support. One of the studies reviewed was that of Litwin and Stringer (1968) in which nine a priori climate dimensions (structure, responsibility, reward, risk, warmth, support, standard, conflict, and identity) were identified. Muchinsky (1976) factor analyzed the Litwin and Stringer climate questionnaire and found six derived dimensions which he referred to as interpersonal milieu, standards, general affective tone toward management, organization structure and procedures, responsibility, and organizational identification. Other attempts to generate taxonomies of climate using factor analysis techniques, including those of Payne and Pheysey (1971), Pritchard and Karasick (1973), and Joyce and Slocum (1984), yielded 2, 11 and 6 dimensions respectively.

The above studies indicate that there is still considerable diversity in the number and type of dimensions used to explain the climate construct. Since it appears unlikely that standardized climate scales that manifest high validity and reliability across different types of organizations can be constructed, Muchinsky (1976) suggested doing routine factor analysis of a climate questionnaire when the type of organization of interest has not been examined before.

MOTIVATION

Vroom (1964) hypothesized that employee job performance is a function of motivation and ability. Motivation is, in turn, defined as a force impelling a person to act in a certain way, determined by the interaction of the person's expectancy that the act will be followed by a particular consequence and the attractiveness (valence) of that consequence to the person. Since motivation is far more subject to environmental influences than ability, it follows that an effective method to influence behavior and performance would be to influence motivation.

Vroom's theory of expectancy, as stated above, has subsequently been revised and modified by a number of other researchers including Galbraith and Cummings (1967), Porter and Lawler (1968), and Campbell et al. (1970). Various empirical studies conducted to test the theory has led many behavioral scientists to conclude that the expectancy theory represents the most comprehensive, valid, and useful approach toward understanding motivation (Nadler and Lawler 1983).

The theoretical framework used in this study with regard to motivation was based upon the expectancy model of motivation developed by Lawler and associates. Basically, this theory posits that a person's motivation is a multiplicative function of three components: (1) an effort-to-performance ($E \rightarrow P$) expectancy, (2) a performance-to-outcome ($P \rightarrow O$) expectancy, and (3) perceived valence of outcomes (V).

The $E \rightarrow P$ expectancy refers to the individual's perception of the likelihood that hard work (effort) will lead to good performance. The $P \rightarrow O$ expectancy (instrumentality) refers to the individual's perception of the likelihood that good performance will lead to the attainment of certain outcomes or rewards. Valence refers to the perceived attractiveness or importance of a particular outcome or reward to the individual.

In short, a person's motivation to perform is influenced by the person's belief that effort can be converted to performance and the net attractiveness of the outcomes that stem from this performance. This can be expressed simply as:

$$\text{Motivation (M)} = (E \rightarrow P) \sum [(P \rightarrow O)(V)]$$

CLIMATE-MOTIVATION RELATIONSHIPS

Research evidence suggests that specific climate factors may influence employees' expectancy and instrumentality beliefs, and hence motivation. For example, in a study of job characteristics, Hackman and Lawler (1971) found significant relationships between core job dimen-

sions (skill variety, task identity, task significance, autonomy, and feedback) and internal work motivation. James et al. (1977) examined relationships between psychological climate and components of a valence-instrumentality-expectancy model and concluded that psychological climate was significantly and meaningfully related to various aspects of instrumentality and valence. Using a framework based upon the expectancy theory of motivation, Teas (1982) found salespersons' instrumentality estimates to be positively related to personality, leadership style, communication, and task characteristics variables.

On the basis of these evidences, the present study proposes to examine the following overall hypothesis: employees' work motivation will vary according to their perceptions of organizational climate. The study will also report factor analysis results of the climate and motivation variables.

METHOD

SAMPLE

The data for this study were obtained as part of a larger study on organizational climate, motivation, job satisfaction, and job performance. The respondents were 74 employees selected conveniently from a large, heavy manufacturing company located in Shah Alam. The majority of the respondents were production operators (76%) with the remainders being team leaders (4%), assistant managers (12%) and support personnel (8%). Ninety-two percent of the respondents were between 20 to 30 years of age with the median age being 25. About 70% of the respondents have been with the company for 2 to 3 years. The median salary was \$478 per month. All respondents had at least a secondary school education.

PROCEDURE

The researchers were introduced to the respondents by the personnel manager of the organization in a training room made available by the organization. One of the researchers then explained the purpose of the study and answered any questions raised. In order to allay any fears and suspicions and hence reduce respondent bias, the researcher emphasized that the study was a university-sponsored research project and not company-connected. The respondents were also told that their responses would be held in the strictest confidence.

A 247-item questionnaire was then distributed to all the respondents. Each respondent was asked to read the instructions carefully before completing the questionnaire. The respondents took approximately an hour to complete the questionnaire.

MEASUREMENT

Climate measures Perceived organizational climate was measured using a modified version of the Litwin and Stringer (1968) questionnaire (Form B). This modified measure contained 31 items scored on a three-point scale ranging from disagree (1) to agree (3). The items were factor analysed via principal factor analysis and components with eigenvalues ≥ 1.0 were rotated by the varimax procedure.

Motivation measures Motivation was measured by calculating a work motivation score using selected items (with slight modifications) from a short version of a questionnaire developed by Lawler and associates. The items were constructed to measure respondents' perception that expending effort would lead to good job performance (E \rightarrow P expectancy), their perception that performing their job well would lead to the attainment of certain job outcomes (P \rightarrow O expectancy) and how important these outcomes were to them (valence). A three-point scale was again used for measurement. Traditional job outcomes such as pay, bonus, and job security were presented. The complete list of outcomes used in the study is given in Table 6.

As suggested by the expectancy theories of motivation, the P \rightarrow O expectancy was multiplied by its corresponding valence factor for each of the job outcomes. The score obtained by summing these multiplications across all outcomes was then multiplied by the E \rightarrow P expectancy score to obtain a total work motivation score (WMS-1) for each respondent. The equation used was $(E \rightarrow P) \times \sum[(P \rightarrow O)(V)]$ as presented earlier.

RESULTS

The factor analysis of the climate items yielded 9 factors which together accounted for 74% of the total variance (see Table 1). Procedure for selecting items to represent each factor consisted of retaining only those items with a loading of at least .40 on that factor and low loadings on all other factors. The resulting climate dimensions are described in Table 2 and the internal consistency reliability of each scale (Spearman-Brown estimates) are shown in Table 3. These estimates ranged from .53 to .91 and are considered sufficient for research purposes (Guilford 1954).

A factor analysis of the valence items resulted in a clean, three-factor solution in which all of the 10 items had high loadings ($> .55$). The first factor explained 29 % of the variance while the second and third factor explained 19% and 17% of the variance respectively, giving a total explained variance of 65% for the three factors (see Table 4). Examination of the items which defined each of the three

factors led to the following interpretations: Factor I labelled as company-mediated outcomes; Factor II labelled as self/work-group mediated outcomes; and Factor III labelled as self-development outcomes.

TABLE 1. Results of Factor Analysis for the Climate Items.

b Item	Factor ^a									h ²
	I	II	III	IV	V	VI	VII	VIII	IX	
1. Full responsibility to do work	.92									.90
2. Management cautious in decisions	.90									.85
3. Employees encourage to speak up	.90									.86
4. Management prefers to be cautious	.89									.85
5. Company willing to take risks	.86									.83
6. Steer clear of open arguments	.79									.72
7. Set own performance standards	.54									.70
8. Make own work decisions	.51		.41			.44				.74
9. Pay fair compared with other firms		.83								.81
10. Pay fair compared with peers		.77								.74
11. Pay higher than other companies		.73								.66
12. Good employee benefits		.70								.65
13. Company gives enough recognition		.63								.68
14. Warmth between management & workers		.47								.71
15. Job objectives set by management			.85							.86
16. Tasks set by management			.83							.81
17. Employees set production standards			.81							.80
18. Employees are loyal to company				.83						.76
19. Proud to belong to company				.68						.67
20. Company cares about employees				.59						.52
21. Can get assistance from boss				.47		.46				.64
22. Cooperation among employees					.85					.80
23. Employee-superior cooperation					.69					.72
24. Can get assistance from co-workers						.62				.61
25. High performance standards set						.61				.76
26. Emphasis on rules and regulations							.88			.83
27. Too many rules and regulations							.68			.60
28. Unclear who has formal authority								.84		.74
29. Clear on company policies								.69		.68
30. Realistic and achievable goals									.77	.75
31. Maximum effort required									.67	.71
Eigenvalues	5.74	3.35	2.93	2.07	1.99	1.83	1.78	1.70	1.58	
Percent of variance explained	18.5	10.8	9.4	6.7	6.4	5.9	5.8	5.5	5.1	
Cumulative variance (%)	18.5	29.3	38.7	45.4	51.8	57.7	63.5	69.0	74.1	

Note: a. Only loadings $\geq | \pm .40 |$ are presented.

b. See Appendix A for a more complete description of the items

When the corresponding P \rightarrow O expectancy items were factor analysed, the results were similar to that of the valence component analysis, that is, each of the 10 job outcomes loaded on similarly designated factors in both the analyses. Based on the above results, three additional motivation scores were computed to reflect (1) motivation related to company-mediated outcomes (WMS-2); (2) motivation related to self/work-group mediated outcomes (WMS-3); and finally (3) motivation related to self-development outcomes (WMS-4). Relia-

TABLE 2. Organizational Climate Dimensions

Factor I: Risk and Conflict	The company's emphasis on risk-taking or playing it safe, and the emphasis placed on encouraging differing opinions from employees, as perceived by employees.
Factor II: Reward	The feeling of being adequately and fairly rewarded.
Factor III: Autonomy	The feeling of being given a say in making decisions regarding work objectives, procedures and standards.
Factor IV Identity	The feeling of pride and loyalty toward the company
Factor V Cooperation	The feeling that organization members work together as a team.
Factor VI: Support	The perceived helpfulness of supervisors and peers in job-related matters.
Factor VII: Rules orientation	The feeling that management places a lot of emphasis on rules, regulations and red-tape.
Factor VIII: Clarity of structure	The perception that policies and responsibilities are well-defined.
Factor IX. Performance standard	The perceived goal difficulty and pressure for performance.

TABLE 3. Reliabilities of the Climate Scales

Scale	No. of Items	Reliability (Spearman-Brown)
Risk and conflict	6	.91
Reward	6	.84
Autonomy	4	.82
Identity	3	.57
Cooperation	2	.75
Support	3	.54
Rules orientation	2	.64
Clarity of structure	2	.53
Performance standard	2	.55

bility coefficients (Cronbach alpha) for each of the motivation scales are presented in Table 5. All the scales had reliabilities above an acceptable level of Cronbach $\alpha = .55$.

Table 6 presents the means and standard deviations of the valence and P \rightarrow O expectancy for each outcome. Inspection of the valence means indicate little differences in the importance placed on the

various outcomes except for praise from supervisor. Most of the outcomes were highly valued, especially pay raise, job security, opportunity to develop skills, and opportunity to learn new things. The means reported for the P → O expectancy outcomes were all lower than the means for the valence outcomes. It can also be observed that there was little variability across subjects within particular outcomes.

TABLE 4. Results of Factor Analysis for the Valence and P → O Expectancy Items

Job Outcomes	Factor I		Factor II		Factor III	
	V	P-→O	V	P-→O	V	P-→O
Company-mediated:						
Pay raise	.83	.81	.18	-.04	-.12	.35
Allowance	.81	.75	-.18	.28	.08	.12
Bonus	.76	.89	.06	.13	.07	.14
Job security	.75	.86	.39	.06	-.11	.11
Promotion	.56	.82	.36	.25	.11	.30
Self/Work-group mediated:						
Respect from peers	.11	.37	.78	.37	.05	.28
Praise from supervisor	-.03	.36	.76	.57	.03	.15
Feeling of achievement	.28	-.03	.61	.91	.15	.02
Self-development:						
Opportunity to develop skills	.00	.16	.09	.28	.90	.77
Opportunity to learn new things	.01	.22	.10	-.04	.90	.84
Eigenvalues	2.90	3.78	1.92	1.54	1.69	1.65
Percent of variance explained	29.0	37.8	19.2	15.4	16.9	16.5

Table 7 shows the correlations between the 4 motivation measures and the 9 dimensions of organizational climate. Of the 36 correlation coefficients reported, 16 (44%) were statistically significant ($p < .05$).

It can be seen from Table 7 that only the climate dimension of risk and conflict and the identity dimension were significantly related to all the motivation components, while other dimensions such as

TABLE 5. Reliabilities of the Motivation Scales

Scale	No. of items	Reliability (Cronbach α)
WMS-1	10	.85
WMS-2	5	.91
WMS-3	3	.58
WMS-4	2	.66

TABLE 6. Means and Standard Deviations for the Valence and P → O Expectancy Items

Items	P → O Expectancy		Valence	
	Mean	SD	Mean	SD
Pay raise	2.52	.67	2.93	.30
Allowance	2.09	.91	2.75	.49
Bonus	2.41	.82	2.78	.48
Job security	2.56	.71	2.97	.23
Promotion	2.38	.74	2.77	.49
Feeling of achievement	2.52	.61	2.81	.43
Praise from supervisor	2.07	.72	1.84	.78
Respect from peers	2.53	.60	2.67	.58
Opportunity to develop skills	2.78	.54	2.96	.20
Opportunity to learn new things	2.82	.42	2.96	.20

TABLE 7 Correlations of the Motivation Scores and Organizational Climate Component Scores

Climate Components	Motivation			
	Total	Company Mediated	Self/Group Mediated	Self-Development
	WMS-1	WMS-2	WMS-3	WMS-4
Risk and conflict	.44**	.41**	.37**	.49**
Reward	.27*	.19	.29**	.40**
Autonomy	.07	.07	.03	.20
Identity	.41**	.37**	.37**	.39**
Cooperation	.20	.16	.28**	.33**
Support	.28*	.36**	.02	.40**
Rules orientation	.03	.00	.07	.13
Clarity of structure	.04	.01	.08	.04
Performance standard	.11	.04	.15	.19

* p < .05

** p < .01

reward, support, and cooperation were significantly related to 2 or 3 of the 4 motivation components. The dimensions of autonomy, rules orientation, clarity of structure, and performance standard did not correlate with any of the motivation components.

Viewed from the motivation perspective, motivation arising from self-development needs (WMS-4) correlated significantly with 5 of the 9 climate dimensions while motivation from company-mediated outcomes (WMS-2) and motivation from self/work-group mediated outcomes (WMS-3) were significantly related to 3 and 4 of the climate dimensions respectively. All the correlations were of a moderate level of magnitude.

DISCUSSION

The hypothesis in this pilot study was partially supported. Taken as a whole, the correlation results suggest that certain climate dimensions are related to motivation, while others appear unrelated to motivation. Also, motivation from self-development outcomes seems to be influenced by more climate factors than company-mediated outcomes.

From the correlation analysis results in Table 7, it can be seen that a clear positive relationship exists between risk and conflict, reward, identity, and support with employees' total work motivation level. The significant relationship between risk and conflict and motivation suggests that employees who perceive their management as cautious in making decisions have a higher level of motivation. Allowing and encouraging employees to speak their minds as well as voice their disagreements openly seem also to have high motivational potential.

As expected, the reward component is found to be related to motivation, that is employees who perceive their rewards as fair and adequate have a higher level of motivation and vice versa. This is consistent with various theories on rewards (Porter and Lawler 1968; Campbell, et al. 1970; Nadler and Lawler 1983). In this study, however, reward did not correlate significantly with motivation from company-mediated outcomes. Low pay and the absence of any bonus or other incentive schemes for production operatives in the organization under study may have accounted for this insignificant linkage.

Employees who feel proud of belonging to their company and who see the company as one which shows genuine concern in their welfare are also found to have higher motivation, as indicated by the significant correlation between the identity dimension and motivation. It may be that employees who identify with their company will take a personal interest in carrying out assigned tasks well. This finding is also in line with organizational psychology theory which

posits that employees identification with the organization has positive influence on their expectancies and instrumentalities (Tyagi 1982). Several studies have also shown that management styles characterized by high consideration for employees will have a positive impact on employees' instrumentality expectancies and hence motivation (James et al. 1977; Teas 1981; Teas 1982).

The finding that the support dimension correlated significantly with total motivation is congruent with the findings of James et al. (1977) who in a study of managerial employees found leadership facilitation and support to correlate significantly with both intrinsic and extrinsic motivation. Employees who have supportive supervisors and co-workers are more likely to believe that efforts will lead to good performance, which in turn will bring about desired rewards. Support also correlated significantly with motivation from company-mediated outcomes and self-development outcomes suggesting that employees believe that with assistance from co-workers and supervisors company-mediated rewards and the opportunity for self-development are likely to result.

The support factor, however, did not correlate significantly with motivation from self/work-group mediated outcomes. This may be partly due to the low priority given by employees to praise from supervisor (see Table 6). In Malaysia it is not customary for supervisors to openly give praise to employees for work well done.

It is interesting to note that the cooperation factor correlated with only 2 of the 4 motivation components, that is motivation from self/work-group mediated outcomes and from self development outcomes. This may be that teamwork within the work group is seen as instrumental to good performance, which in turn will lead to praise and respect from members in the work group as well as the opportunity to acquire new skills and knowledge. James et al. (1977) also found cooperation to correlate significantly with extrinsic motivation mediated by the work environment.

The autonomy dimension in this study failed to correlate with any of the motivation components. This seems to suggest that the respondents in this study are not too concerned as to whether they are involved in the setting of tasks, work objectives and performance standards. This is not surprising since tasks on the production floor in the organization under study are highly structured and mostly automated. The above finding is, however, contrary to previous findings where, for example, James et al. (1977) found job autonomy to be significantly related to intrinsic motivation. Tyagi (1982) also found a significant positive relationship between involvement in decision making and employees' instrumentalities and motivation. Employees who are allowed to participate in decisions regarding their work should have more control over their job, which in turn will

enhance the belief that efforts will lead to good performance and that good performance will lead to desired outcomes.

Performance standard and structural factors such as rules orientation and clarity of policies and responsibilities do not seem to influence employees' motivation. It should be noted that the reliabilities of these three factors are moderately low. The non-linkage between structure and motivation is supported by Teas (1981) who in a study of 171 industrial salespersons found initiation of structure to be unrelated to both expectancy and instrumentality estimates. Another study by the same researcher of 93 retail sales personnel also found little linkage between initiation of structure and instrumentality (Teas 1982).

CONCLUSION

The findings from this study indicate that an open, supportive climate where management is genuinely concerned about employees' welfare, together with a fair and competitive reward system will likely have a positive impact on employees' motivation. Therefore, measures to initiate such a climate may be justified. However, since the magnitude of the relationships between the various climate factors and motivation is not overly large, future research studies will need to investigate the influence of other factors that either directly affect motivation or moderate the climate-motivation relationship.

A limiting factor in the present study was that only a limited convenient sample of production employees were used and some of the findings may be unique to this sample. Caution, therefore, must be exercised in interpreting the data and generalizing the preliminary findings reported in the study. Also, the variables measured in the study were based on employees' subjective beliefs which may differ from objective reality. Despite these limitations, some noteworthy findings have been found which can serve as a basis for future research.

APPENDIX A

The Climates Variables

Item No.	Items
1.	I am given full responsibility to do my work well.
2.	Management is always cautious in making any decision.
3.	Employees here are encouraged to speak their minds even if it means disagreeing with their superiors.
4.	Management prefers to be cautious so as to be safe.

Appendix A — continued

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- 5 This company is willing to take some risks to keep ahead of the competition.
 - 6 The best way to make a good impression around here is to steer clear of open arguments and disagreements.
 - 7 I am allowed to set my own performance standards.
 8. My boss lets me make my own decisions regarding my work.
 - 9 My pay is fair considering what other companies are paying for the same job.
 - 10 My pay is fair compared with fellow workers doing the same job.
 - 11 The pay here is higher than in other companies.
 12. Compared to other companies, employee benefits here are good.
 - 13 This company gives enough recognition to those who do their work well.
 14. There is a lot of warmth in the relationship between management and workers.
 - 15 Our job objectives are set by management.
 16. All our tasks are set by management.
 - 17 Employees here set their own production standards.
 18. Employees here are loyal to the company.
 - 19 I am proud of belonging to this company
 - 20 This company is really interested in the welfare of its employees.
 - 21 When I am on a difficult assignment I can usually count on getting assistance from my co-workers.
 22. There is cooperation among employees here.
 - 23 There is cooperation between employees and their superiors.
 24. When I am on a difficult assignment I can usually count on getting assistance from my co-workers.
 - 25 This company sets high performance standards.
 26. Formal rules and regulations are given a lot of emphasis by top management.
 - 27 This company has too many rules and regulations that has to be followed.
 28. I am unclear as to who has the formal authority to make a decision.
 - 29 I am clear as to the policies of the company
 30. The goals I am supposed to achieve are realistic and achievable.
 31. Employees here are required to put in their maximum effort.
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