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ABSTRACT

The interrelationships among job involvement, values, personal background, participation in decision making, and job attitudes were investigated by questionnaire for a sample of 2,775 employees of six manufacturing organizations, representing a 66 percent response rate. The results of this study indicated that job involvement, a basic orientation toward work, may be affected by individual differences brought to the job and by characteristics of the job situation. The results also indicated that job involvement may not be an appropriate variable for moderating the relationships between job characteristics and employee responses to the job. These results were discussed in relation to previous research and theory, and suggestions were offered for future research in this area. A list of references concerned with workers' job involvement is attached. Three tables offer statistical correlations of job involvement with background factors and values of workers surveyed in this study and of correlations between decision-making participation and job attitudes for rank and file workers and for managers. An appendix describes the study's finding that job involvement is strongly and positively related to the Protestant ethic. (Author/SD)

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JOB INVOLVEMENT: A CONSTRUCT VALIDITY STUDY

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Abstract

The interrelationships among Job Involvement, values, personal background, participation in decision making, and job attitudes were investigated for a sample of 2755 employees of six manufacturing organizations. The results of this study indicated that job involvement, a basic orientation toward work, may be affected both by individual differences brought to the job and by characteristics of the job situation. The results also indicated that job involvement may not be an appropriate variable for moderating the relationships between job characteristics and employee responses to the job. These results were discussed in relation to previous research and theory, and suggestions were offered for future research in this area.

The majority of theory, research and application in the field of industrial and organizational psychology historically has emphasized one of two classes of "independent" variables. Personnel selection psychologists have emphasized individual difference variables and largely ignored organizational variables, while organizational psychologists have emphasized job and organizational characteristics and largely ignored individual difference variables.

Lawler (1972) and Schein (1971) have presented compelling arguments for the case that future theory, research, and application in industrial and organizational psychology should not exclusively look to either individual differences or organizational and job characteristics as the primary determinants of employee responses to the job. According to these authors, a more fruitful approach would emphasize interactions between individual differences and organizational and job characteristics.

Schein (1971), for example, argued for a "complex man" perspective on the interaction between the individual and the organization, in which individual needs are viewed as complex and variable both between individuals and within individuals over time.

Similarly, Lawler (1972) argued against both trying to fit individuals into immutable organizations and jobs and against prescribing more participation and job enrichment for all people under all circumstances. According to Lawler, a more fruitful approach would consist of

"individualizing organizations" to fit the differing needs, values, and expectations of different employees.

However, as Lawler pointed out, research on the individual difference variables relevant to this approach is not at a very advanced stage. While much attention has been devoted to developing reliable and valid measures of occupationally relevant abilities and skills, little empirical work has been done on work-related needs, values, and expectations.

In addition, the previous research on the effects of individual differences on the relationships between job characteristics and employee responses to the job has yielded ambiguous and conflicting results. Tosi(1970), for example, was unable to replicate the results of Vroom's (1959) classic study on the effects of authoritarianism and the need for independence on employee responses to participation in decision making.

Similarly, the findings of Turner & Lawrence (1965) and Blood & Hulin (1967) that employees from rural backgrounds and employees who have internalized "middle class work values" such as the Protestant ethic are more likely to respond "positively" to job enlargement are far from conclusive. In both of these studies, the urbanization of the plant sites involved was used to moderate the relationships between job characteristics and employee responses. Neither study directly investigated the effects of the size of community in which the employees actually has been raised, currently lived, or preferred to live, nor did either study directly measure employee needs, values, or expectations. In addition, in both

the Blood & Hulin and Turner & Lawrence studies the final data analyses were only subsets of the total set of analyses performed on the same set of data and were performed only when the initial analyses failed to produce the predicted results. Blood & Hulin, for example, failed to find support for their hypotheses in their original sample, and even when they restricted their analysis to blue collar employees, only 4 out of 84 correlations were significant at the .01 level.

More recent studies which have directly investigated the size of community in which employees were raised, currently lived, and preferred to live and attempted to directly measure employee values have failed to support the hypothesized moderating effects of community size on the relationships between job characteristics and employee responses (Blood, 1968; Siegel & Ruh, 1973). Blood (1968) attempted to replicate the results of Blood & Hulin (1967) and to extend these results by developing and investigating a direct measure of "acceptance of middle class work values." According to the Hulin & Blood (1968) model, differences in community size were hypothesized to lead to measurable differences in work values and both background differences and work values were hypothesized to be related to the responses of workers to job characteristics. The data provided no support for these hypotheses. Personal background data did not replicate the moderation of the relationships between job characteristics and employee responses found by Blood & Hulin and Turner & Lawrence. The direct measure of work value also failed to moderate these relationships. In contrast to predictions from Hulin& Blood's model, work values were related directly to job attitudes, such that acceptance of

the Protestant ethic was positively related to job satisfaction.

Similarly, a study by Siegel & Ruh (1973), while not designed as a direct replication of Blood & Hulin, obtained results which were inconsistent with predictions made from the Hulin & Blood model. Data collected from 2628 employees of 6 manufacturing organizations yielded results in directions opposite to those predicted. That is, JI was positively related to community size, and the relationship between participation and JI was more positive for more urban employees than for less urban employees.

It seems obvious that more research is needed on the effects of personal background and work values on the relationships between job characteristics and employee responses to the job, if approaches to theory and application similar to those outlined by Schein (1971) and Lawler (1972) are to be based on more than intuitive speculation. The development of measures of work values, needs and expectations and the further investigation of the effects of specific background variables such as community size for which previous research has yielded ambiguous results, it would seem, should receive emphasis in this research.

The present study was therefore designed to investigate JI, a construct which has been discusses as a work value orientation which may moderate the relationships between job characteristics and employee responses to the job. The previous work on JI has not been characterized by a great deal of conceptual precision. However, two related definitions by Lodahl & Kejner (1965) seem to include the most frequent conceptions of JI: (1) "the degree to which a person is psychologically identified with his work, or the importance of work in his total self image", (2) "the degree to which a person's work performance affects his

self-esteem" (p. 24 and 25). Lodahl and Kejner viewed JI as a value orientation toward work, similar to the Protestant ethic, which is learned early in the socialization process and is not easily influenced by the immediate job situation. It also seems that JI is quite similar to Hulin & Blood's construct of "acceptance of middle class work values." These values are described by Hulin & Blood (1968) as including "positive affect for occupational achievement, a belief in the intrinsic value of hard work, a striving for the attainment of responsible positions, and a belief in the work-related aspects of Calvanism and the Protestant ethic" (p. 12). According to Blood (1968), "The construct of 'nonacceptance of middle class work values' suggests that there are workers who would rather have jobs which do not demand personal involvement." (p. 12).

In addition to the work of Blood (1968) and Siegel & Ruh (1972), several studies have investigated JI (Farris, 1971; Goodman, Furcon, & Rose, 1969; 1970; Lawler & Hall, 1970; Lodahl, 1964; Lodahl & Kejner, 1965; Peltz & Andrews, 1966; Schwyhart & Smith, 1972; Weisenberg and Gruenfeld, 1968) and related concepts such as ego involvement (Vroom, 1962), job interest (Patchen, 1965), and work role involvement (Maurer, 1967).

In general, the results of this research have indicated that it is possible to operationally distinguish JI from job satisfaction (Lawler & Hall, 1970; Lodahl, 1964; Lodahl & Kejner, 1965) and that JI may be positively related to organizational and job characteristics of the type discussed by the advocates of participative management and job enrichment (Lawler & Hall, 1970; Lodahl & Kejner, 1965; Maurer, 1967; Patchen, 1965; Weissenberg & Gruenfeld. 1968). On the other hand, the results of the only

studies which directly investigated the relationships among JI, job characteristics, and personal background yielded results which were inconsistent with Lodahl & Kejner's original hypothesis concerning the determinants of JI and with Hulin & Blood's emphasis on JI as a value orientation which moderates the relationships between job characterisitics and employee responses (Blood, 1968; Siegel & Ruh, 1972).

These results cannot, of course, be interpreted as proving the position of the advocates of participative management and job enrichment and disproving the position of Lodahl & Kejner and Hulin & Blood. Obviously, more data are needed in order to clarify the relationships among JI, job characteristics and personal background variables. The purpose of the present study is to provide such data. It was hypothesized that JI would be related to personal background, life values, and participation in decision making and that JI would moderate the relationships between participation and job attitudes. Consistent with Hulin & Blood's model, it was hypothesized that JI would be related to life values reflecting endorsement of the Protestant ethic and that job attitudes would be more positively related to participation in decision making for highly involved individuals than for individuals who are less involved in their jobs.

METHOD

Sample

All data used for this investigation were obtained from questionnaires distributed to all of the employees in 19 plants of six Midwest manufacturing concerns. The companies ranged from 150 to 3500 employees and all operated under some form of the Scanlon Plan. Of 4162 questionnaires distributed, 2755 (66%) usable ones were returned. Median education for this sample was twelfth grade, mean age was 35; and mean tenure was 3.89 years. Forty-six percent were raised on farms, 46% were raised in communities between 2,000 and 100,000 and 9% were raised in cities greater than 100,000.

Variables Measured

JI, participation in decision making, (PDM), and the job attitudes motivation (MOT) and identification (ID) were measured by summing the responses to the five-point Likert type items.

These scales were derived on the basis of a series of cluster analyses designed to maximize both convergent and discriminant validity. The JI scale consists of seven items from the original Lodahl and Kejner scale plus two items that appeared to fit both psychologically and empirically. The resultant scale yielded an alpha reliability estimate of .87 and a median item correlation with the other scales of .43. The remaining scales were formed in a similar fashion. Reliability estimates can be found in Table 2.

Values were measured with the Rokeach (1969) instrument that yields separate rankings of 18 terminal values (idealized end states of existence) and 18 instrumental values (idealized modes of behavior).

Background factors were measured by fifteen items related to education, religious habits, father's occupation, and geographical background. (See Table 1).

Analyses

To investigate the moderating effect of JI on the relationship between PDM and job attitudes the sample was trichotomized into "high", "medium" and "low" thirds on JI and the correlations were computed separately within these subgroups.

In order to correspond more closely to previous research (Blood & Hulin, 1967) most of the analyses were conducted separately for the rank and file (those with no supervisory responsibility) and managers.

RESULTS

The first hypothesis dealt with the relationship between JI and background factors. These correlations, broken down by hierarchical level, are presented in Table 1.

Insert Table 1 about here

A multiple regression of those 15 background factors with JI yielded an R of .32 ($N=1328$, $p < .0005$).

Similar analyses were used to investigate the second hypothesis regarding the relationship between JI and values. Correlations between JI and ten values corresponding to those discussed in previous literature are included in Table 1. A multiple regression based on all 36 Rokeach values with JI yielde an R of .37 ($N=1328$, $p < .0005$). A third multiple correlation of .45 was

obtained for the combination of values and background factors with JI.

The third hypothesis dealt with the relationship between PDM and JI. This correlation is included with the intercorrelations of all the scales in Table 2.

Insert Table 2 about here

The fourth hypothesis dealt with the interaction between JI, PDM, and job attitudes. Specifically it was hypothesized that the correlations between PDM and the job attitudes MOT and ID would decrease monotonically from the "high" to "low" JI subgroups. These correlations are presented separately for the manager and rank and file samples in Table 3.

Insert Table 3 about here

DISCUSSION

The results of the first three hypotheses suggest that personal background, values, and job characteristics all influence JI. The Lodahl and Kejner original hypothesis, that JI is a basic value orientation, was partially supported by the R of .37 with the Rokeach values. Supposedly this instrument measures an exhaustive set of basic life values and hence this figure should theoretically reflect the extent to which JI is a basic value orientation. However, the fact that the instrument is difficult to fill out and appeared at end of a lengthy questionnaire makes its reliability suspect. Similarly, background factors were shown to

account for a small, but significant and unique amount of the variance in JI. However, it should be emphasized that the relationship of individual background factors, such as community size, with JI, is complex. Previous assumptions of simple relationships (e.g., Hulin & Blood, (1968) do not appear to be justified.

The correlation of .53 between PDM and JI indicates that characteristics of the immediate job situation may exert considerable influence on JI. However, it should be cautioned that since both JI and PDM were measured with questionnaire items with a socially desirable direction, the obtained correlation may be somewhat inflated by response bias. In addition, given this study's design, these results may indicate that JI causes PDM, or that both JI and PDM are caused by an unmeasured third variable.

PDM was chosen as the most relevant characteristic of the job situation because it is formally stressed, as an integral part of the Scanlon Plan, in all of the companies sampled. Despite the qualification mentioned above, the correlation between PDM and JI is in keeping with Lodahl and Kejner's interpretation of their data; and is supportive of several of the human relations theorists who contend that one's basic work orientation is influenced by characteristics of the job situation. In this respect, JI appears to behave the same as a job attitude such as satisfaction and identification. In the present study JI correlations with PDM were very comparable to those of the two job attitudes. However, both the relationship reported here between JI and personal background and the previous work of Lawler and Hall (1970) indicates that JI does differ from other job attitudes.

The relationship between PDM and job attitudes did not decrease monotonically from the "high" to "low" JI groups as suggested

by the fourth hypothesis. In one case it increased monotonically (JI and MOT for rank and file) and in this case plus another (JI and MOT for managers) the correlation for the "low" group was significantly higher than that of the "high" group. There are two possible explanations for this. First, since JI is not just a stable value orientation brought to the job but, like job attitudes, is also influenced by the job situation, then it cannot be expected to moderate the relationship between job characteristics and these job attitudes. The second explanation is that JI may not be the appropriate moderator. Ignoring the part of JI under the direct influence of the job situation, JI is a measure of individual differences brought to the job. These differences involve a basic commitment to the work ethic and bear an obvious relationship to the Protestant ethic. However, it seems very plausible that people high on this dimension are the ones who would report positive job attitudes independent of the characteristics of the job situation. This idea is supported by the high correlations between JI and job attitudes reported here, and the correlations between JI and satisfaction reported by Blood (1968) and Schwyhart and Smith (1972). Therefore, while this "high" JI group would report positive job attitudes, the correlation between these job attitudes and characteristics of the work situation (PDM) would be low. Persons on the other end of the continuum, those who do not have the basic commitment to the work ethic, are the ones whose job attitudes are more under the control of the immediate work situation and therefore it is this group that would yield a high correlation between PDM and job attitudes. This interpretation yields predictions precisely opposite to those based on the Hulin and Blood model.

It would seem, therefore, that future attempts to moderate

the relationships between job characteristics and employee responses to the job should emphasize individual difference variables which are not likely to be influenced by job characteristics and which are conceptually dissimilar to the Protestant Ethic. Future research on JI should emphasize longitudinal studies from which more conclusive cause and effect inferences could be drawn.

References

Blood, M. R. Relationships among workers' backgrounds, attitudes, behaviors and values. Unpublished Doctoral dissertation, University of Illinois, 1968.

Blood, M. & Hulin, C. Alienation, environmental characteristics, and worker responses. Journal of Applied Psychology, 1967, 51, 284-290.

Farris, G. F. A predictive study of turnover. Personnel Psychology, 1971, 24, 311-328.

Goodman, P. S., Furcon, J. E. & Rose, J. H. Examination of some measures of creative ability by the multi-trait-multimethod matrix. Journal of Applied Psychology, 1969, 53, 240-243.

Goodman, P. S., Rose, J. H. & Furcon, J. E. Comparison of motivational antecedents of the work performance of scientists and engineers. Journal of Applied Psychology, 1970, 54, (6), 491-495.

Guilford, J. P. Fundamental statistics in psychology and education. New York: McGraw-Hill, 1965.

Hackman, J. & Lawler, E. Employee reactions to job characteristics. Journal of Applied Psychology, 1971, 55, 259-286.

Herzberg, F. Work and the nature of man. Cleveland: The World Publishing Company, 1966.

Hulin, C. & Blood, M. Job enlargement, individual differences and worker responses. Psychology Bulletin, 1968, 69, (1), 41-55.

Lawler, E. E. III. Individualizing organizations. Paper presented at the MPA Convention, May, 1972.

Lawler, E. and Hall, D. The relationships of job characteristics to job involvement, satisfaction and intrinsic motivation. Journal of Applied Psychology, 1970, 54, 305-312.

Likert, R. New patterns of management. New York: McGraw-Hill, 1961

Lodahl, T. Patterns of job attitudes in two assembly technologies. Administrative Science Quarterly, 1964, 8, 482-519.

Lodahl, T. & Kejner, M. The definition and measurement of job involvement. Journal of Applied Psychology, 1965, 49, 24-33.

Maurer, J. G. The relationship of work role involvement to job characteristics with higher-order need potential. Unpublished Doctoral dissertation, Michigan State University, 1967.

McGregor, D. The human side of enterprise. New York: McGraw-Hill, 1960.

Patchen, M. Labor management consultation at TVA: Its impact on employees. Administrative Science Quarterly, 1965, 10, 149-174.

Patchen, M. Participation, achievement and involvement on the job. Englewood Cliffs, New Jersey: Prentice-Hall, 1970.

Pelz, D. C. & Andrews, F. M. Scientists in organizations: Productive climates for research and development. New York: John Wiley, 1966.

Rokeach, M. Beliefs, attitudes, and values: A theory of organization and change. San Francisco: Jossey-Bass, 1968.

Schein, E. H. Organizational psychology. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.

Schwyhart, W. R. & Smith, P. C. Factors in the job involvement of middle managers. Journal of Applied Psychology, 1972, 56, (3), 227-233.

Siegel, A. L. & Ruh, R. A. Job involvement, participation in decision making, personal background, and job behavior. Organizational Behavior and Human Performance, 1973, 9, 318-327.

Tosi, H. A re-evaluation of personality as a determinant of the effects of participation. Personnel Psychology, 1970, 23, 91-100.

Turner, A. & Lawrence, P. Industrial jobs and the worker: An investigation of response to task attributes. Boston: Harvard University Graduate School of Business Administration, 1965.

Vroom, V. Some personality determinants of the effects of participation. Englewood Cliffs, New Jersey: Prentice-Hall, 1960.

Vroom, V. H. Ego-involvement, job satisfaction, and job performance. Personnel Psychology, 1962, 15, 159-177.

Weissenberg, P. & Gruenfeld, L. Relationship between job satisfaction and job involvement. Journal of Applied Psychology, 1968, 52, 469-473.

TABLE I

Correlations of Job Involvement with Background Factors and Values

Item	Sample Combined (N≈2400)	Rank & File (N≈1950)	Managers (N≈370)
Background Factors			
Geographic background	+.07***	+.10***	-.02
Urban vs. rural background	-.13***	-.06*	-.15**
Urban vs. rural residence	-.18***	-.09***	-.17***
Section of town	+.12***	+.05*	+.18***
Industrialization of home town	-.04*	-.02	-.07
Type of schooling	+.07***	+.05*	+.02
Books around home	+.06**	+.01	+.07
Education	-.01	-.05*	-.10**
Father's education	+.01	-.05	-.01
Mother's education	-.03	-.09***	-.05
Geographic mobility	+.06**	+.05*	-.01
Skill level of father's occupation	+.11***	+.04	+.12*
Frequency of church attendance	+.13***	+.11***	+.18***
Importance of religion	+.16***	+.12***	+.18***
Church activity during youth	+.07**	+.08***	+.06
Values			
Ambitions	+.15***	+.14***	+.14**
Capable	+.13***	±.07**	+.20***
Imaginative	+.01	-.07**	+.07
Independent	-.04*	-.05*	-.06
Responsible	+.06**	+.03	+.03
Self-Controlled	-.03	-.01	-.06
Accomplishment	+.13***	+.05*	+.16
Equality	+.03	+.06*	+.01
Freedom	-.04*	-.05*	+.06
Participation[a]	-.05*	-.00	-.05

Note: - All background factors are coded in such a way that positive correlations are supportive of models proposed by Hulin and Blood (1968) and Schein (1971). That is positive correlations indicate a positive relationship between JI and religiousity, education (including books and mobility), agricultural background (including Southern background), and residing in a prosperous area.
a - This value was not part of the Rokeach instrument. It was measured by summing the responses to two Likert-type items regarding importance attached to participation in the job situation.

*$p < .05$
**$p < .01$
***$p < .001$

TABLE 2

Interscale Correlations
(Alpha Estimates in the Diagonal)

Scale	Scale			
	Job Involvement	Participation in Decision making	Identi-fication	Moti-vation
Job involvement	(.87)			
Participation in decision making	.53	(.81)		
Identification	.58	.47	(.66)	
Motivation	.57	.38	.45	(.69)

Note: - The correlations were also computed separately for the rank and file and manager samples. However, since there were no notable differences only those for the combined sample are reported here.
N≈2740.

TABLE 3

Correlations between Participation in Decision Making and Job Attitudes for the Job Involvement Subgroups

Sample	Job Involvement Group High	Medium	Low	Difference between correlations in high and low groups[a]
Rank & File				
Motivation	.11	.16	.25	$p < .01$
Identification	.29	.22	.28	n.s.
Managers				
Motivation	.15	.11	.38	$p < .05$
Identification	.23	.17	.31	n.s.

Note: - $N \approx 725$ and 130 for the three rank and file and manager subgroups respectively.

a - The significance of this difference was computed with Fisher's transformation to z (Guilford, 1965).

APPENDIX

It was stated in the introduction that job involvement appears to be related to the Protestant ethic construct. To empirically investigate this relationship a questionnaire was developed that contained, alternately, the nine JI items and eight Protestant ethic items. The Protestant ethic items were developed by Blood (1969) and were identical to the original except that the response alternatives were limited to five categories to correspond to the JI response alternatives. Responses were collected from 31 white collar, public, employees who appear to represent a reasonable cross section of hierachical level, salary, age, sex, and education (specific biographical data were not collected). After reflecting the four "non Protestant ethic" items (see Blood, 1969, p. 456), five scales were computed: (1) sum of all 17 items (ALL), (2) sum of the eight Protestant ethic items (PE-ALL), (3) sum of the nine JI items (JI), (4) sum of the four items indicating agreement with the Protestant ethic (PRO-PE), and (5) sum of the four items indicating nonagreement with the Protestant ethic (NON-PE). The following table shows the intercorrelations among the scales with internal consistency (alpha) estimates of reliability in the diagnal.

TABLE

RELIABILITIES AND INTERSCALE CORRELATIONS

	ALL	JI	PE-ALL	PRO-PE	NON-PE
ALL	(.83)				
JI	.93	(.82)			
PE-ALL	.85	.60	(.58)		
PRO-PE	.80	.63	.85	(.56)	
NON-PE	.59	.34	.80	.37	(.29)

The correction for attenuation of the relationship between PE-ALL and JI, using the internal consistency reliabilities, increased the correlation from .60 to .87.

Caution is needed in interpreting the results given the extremely small sample size. However, the findings certainly do support the notion that job involvement is strongly and positively related to the Protestant ethic; at least as the variables were measured here.