JOB INVOLVEMENT, INTERNAL MOTIVATION, AND EMPLOYEES INTEGRATION INTO NETWORKS OF WORK RELATIONSHIPS

Michael K. Moch, Assistant Professor, Department of Business Administration

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Summary:

In the study reported here, hypotheses regarding social determinants of internal motivation and job involvement are generated and tested against data gathered from 522 employees of an assembly and packaging plant. Specifically, it is hypothesized that integration into networks of work-based relationships will be positively associated with internal motivation and negatively associated with job involvement. It is also hypothesized that the strength of these relationships will vary with the employees' orientation toward growth and development. Consistent with the hypotheses, it is found that integration is associated with internal motivation; however, isolates who are growth-oriented are more internally motivated than isolates who are not growth-oriented. There is no main effect of integration on job involvement; however, isolates who are not growth-oriented are more involved in their jobs than are isolates who are growth-oriented. It is concluded that internal motivation and job involvement can be alternative sources of meaning and identity, particularly for people who are isolated from work relationships and therefore are unlikely to be highly involved with the organization.

Acknowledgment:

The author is indebted to Greg Oldham and Joe Porac for their helpful comments on an earlier draft of this paper.
The past decade of research on organizational behavior has seen considerable effort directed toward discovering determinants of employee involvement and internal motivation. Recently much of this research has focused on job characteristics. The implication is that involvement and internal motivation can be stimulated by designing jobs to have variety, autonomy, significance, identity, feedback (Hackman and Oldham, 1976) or other attributes conducive to involvement and motivation. This effort, however, has had to confront some management values and perceptions which are difficult to change. Katz (1964) pointed out long ago, that it may be "...more efficient to produce via assembly line methods with lowered motivation and job satisfaction than with highly motivated craftsmen with a large area of responsibility in turning out their part of the total product."

More recently, Hackman (1978) attributed lack of progress in the application of job design research to the fact that it requires major changes in how organizations are designed and managed. Serious application of job design principles, Hackman argues, runs contrary to the behavioral styles of both employees and managers. Research on the determinants of internal motivation and employee involvement, therefore, should continue to investigate alternatives to job design. Approaches which are compatible with large-scale highly specialized production methods would be particularly valuable, since they could offer an alternative for those organizations most likely to be resistant to job redesign.

One alternative, usually overlooked in the job design literature, considers social relationships as determinants of internal motivation and involvement. The human relations tradition expended considerable energy attempting to document the impact of interpersonal relations on employee
loyalty and involvement (Mayo, 1945; Roethlesberger and Dickson, 1938; Likert, 1961, 1967; Bowers, 1976). Most of this research, however, has been narrowly focused. It emphasizes supervisory style and participation in decision-making. Katz (1964), on the other hand, argues that social involvement is facilitated by 1) participation in important group decisions, 2) contributing to group performance in a significant way, and 3) sharing in the awards of group accomplishment. Katz, however, did not clearly distinguish between involvement in the job and involvement in the organization. He noted that some employees were likely to identify themselves with the organization and prefer to change jobs rather than organizations, while others were likely to prefer to change organizations rather than jobs; however, he considered both of these forms of involvement simultaneously and believed that they were determined by the same factors. Katz also argued that job characteristics were the primary determinants of internal motivation. Social factors were not considered. Subsequently, researchers have tended to ignore social determinants of internal motivation, and they have not explored distinctive characteristics of job—as opposed to organizational— involvement. Also, little effort has been directed toward identifying relationships between social factors and job involvement.

The research reported here has been designed to redress the unbalanced emphasis on job characteristics as determinants of internal motivation and involvement at work. First, job involvement is defined and distinguished from organizational involvement and from internal motivation. Second, hypotheses are generated which specify relationships between integration into and isolation from networks of social relationships on the one hand.
on employees' willingness to work independently of extrinsic rewards. It is important to note that none of these factors reflects employees' involvement in the organization, and research based on Lodahl and Kejner's findings frequently ignores this concept. Whereas organizational involvement refers to the degree to which employees identify with the organization; job involvement concerns the degree to which employees take their identity from their job. The distinction, however, has not been clearly made in organizational research.

Much of the research on job involvement—as distinguished from organizational involvement—reports that this concept also is multifaceted. Reviewing this research, Rabinowitz and Hall (1977) identified two distinct factors: one dealing with the extent to which employees see their work as a component of their self-image and the other dealing with the extent to which employees gain self-esteem from successful job performance. Schuler (1977) identified these same dimensions. Lawler and Hall (1970) referred to the first of these dimensions as psychological identification and to the second as intrinsic motivation. Job involvement, therefore, is distinct from internal motivation in that it has no necessary implications for performance. People may take their identity from their positions or roles without having to perform well or grow and develop on the job. Internally motivated employees, on the other hand, reward themselves for successful performance. They feel a sense of personal satisfaction or self-esteem from performing well. Internal motivation, unlike job involvement, is intrinsically tied to performance. Interestingly, this is the same distinction made by Becker and Carper (1956) in the same year Duhein published his initial article. These authors distinguished between employees who obtain
and job involvement and internal motivation on the other. Third, since characteristics of jobs could confound the expected relationships, hypotheses specifying relationships between social integration-isolation and employees' perceptions of job characteristics are generated. The hypotheses predicting relationships between social integration-isolation and job involvement and internal motivation are then tested against data gathered from 522 employees in a medium-sized assembly and packaging plant. Job characteristics are included in this analysis as controls. The implications of the findings for the design of workflows as well as for the design of jobs is discussed.

Defining and Distinguishing Between Job Involvement and Internal Motivation

Studies of employee involvement, and to some extent internal motivation as well, were initiated by Dubin's study of employees' central life interests. Dubin was concerned with understanding "...the ways in which members become attached to and thereby loyal toward an organization (1956:132)." His initial approach was followed by several researchers (e.g., Brown, 1969; Patchen, 1970; Hall et al., 1970; Sheldon, 1971; Porter, et al., 1974). Each of these studies was concerned with identifying determinants of employees' involvement with the organization, or, as Sheldon put it, "...an orientation toward the organization which links or attaches the identity of the person to the organization."

A second strand of research initiated by Dubin's study concerns job involvement. Beginning with Dubin's idea of the importance work plays in employees' lives, Lodahl and Kejner (1965) identified three relatively stable components of job involvement. The first reflects employees' ratings of how important their job is to them. The second concerns the amount of energy and ambition employees direct toward their jobs, and the third focuses
The expectation that isolated employees will be more rather than less involved in their jobs is inconsistent with Katz's formulation (1964). It also is inconsistent with Lodahl and Kejner (1965) who concluded that "job involvement appears to be...related to the social nearness of other workers." However, neither Katz nor Lodahl and Kejner distinguished between job involvement from involvement in the organization. While social relations may be expected to facilitate involvement in the organization, it does not seem plausible to expect that, other things being equal, they will facilitate job involvement as well. In fact, they may hinder the development of a job-based identity.

Social integration or isolation may have quite a different impact on internal motivation. Internal motivation is generally thought to be determined only by characteristics of the job. Employees who feel good when they perform well do so ostensibly because they feel they have been responsible for successfully completing a significant and meaningful task. Extrinsic factors, therefore, ought not to affect internal motivation. However, the significance of the task is in part determined by the impact it has on other employees. Those who are affected can give social reinforcements to high performers. They can make them aware of the significance of their job and reward high performance with status and esteem. Moreover, as Deci (1972) has pointed out, employees receiving such support may not distinguish between feeling good because of performance per se and feeling good because of the esteem and recognition they may be accorded. Social integration into networks of work relationships may enhance the likelihood that such extrinsic determinants of internal motivation will be forthcoming. The
their identity from their job title and those who do so via commitment to the task and to growth and development through work.

**Job Involvement, Internal Motivation, Employees' Growth-Orientation, and Integration into or Isolation from Networks of Work Relationships**

A considerable amount of research can be marshalled to support the contention that social involvements produce commitment. In addition to the main corpus of the human relations tradition, Brown (1969) suggests that satisfying personal relationships are likely to be associated with involvement. Buchanan (1974) concludes that social interaction plays a role in determining employee loyalty and commitment. Sheldon (1971), referencing Kornhauser (1962), Becker and Carper (1956), Kanter (1968), and Becker (1960) concludes that "there has been agreement that social involvements produce commitment." These authors, however, concerned themselves with commitment to or involvement with the organization rather than involvement with the job.

It seems plausible to expect social relationships to affect organization involvement. Those who are well integrated into networks of social relationships at work will be more likely to participate in decision-making, see clearly how they contribute to group performance and share in the rewards of group accomplishment (Katz, 1964). However, there is no reason a priori why social integration should be expected to stimulate employee involvement in their jobs. There is nothing preventing socially isolated individuals from becoming involved in their jobs. In fact, excluded from social relationships, they may even be more likely to turn to their jobs to find meaning and identity at work.
toward growth may have little alternative but to seek meaning and identity in their function or job title. It is possible, therefore, that the effect of isolation on job involvement may occur primarily for employees who are not growth-oriented.

In summary, then, we will look for the following relationships:

$H_1$: A positive relationship between integration into networks of work relationships and internal motivation.

$H_2$: A negative relationship between integration into networks of work relationships and job involvement.

$H_3$: Greater internal motivation among growth-oriented isolates than would be expected given only main effects.

$H_4$: Greater job involvement among isolates who are not growth-oriented than would be expected given only main effects.

**Controlling for Indirect Effects Through Characteristics of the Job**

Characteristics of jobs have been found to be related to job involvement and to internal motivation. Rabinowitz, Hall & Goodale (1977), for example, found a positive relationship between job scope—composed of autonomy, identity, variety and feedback—and job involvement. The degree of interaction and friendship opportunities afforded by the job also has been shown to be related to job involvement (Hackman & Lawler, 1971; Hackman & Oldham, 1975; Rousseau, 1977). Hackman & Oldham (1976), Oldham, Hackman & Pearce, 1976; Sims & Szilagyi (1976) and others have shown that
isolate is unlikely to receive frequent and visible social rewards for successful performance. We might therefore expect a positive relationship between social integration and internal motivation.

Before accepting this hypothesis, however, it must be reconciled with a plausible and frequently discussed alternative. Hackman and Oldham (1976) have argued that autonomous jobs provide employees with a sense of responsibility without which employees are unlikely to be highly internally motivated. It would seem that isolation could perform the same function and thereby facilitate rather than hinder internal motivation. Hackman and Oldham point out, however, that this relationship can be expected primarily for employees who are oriented toward growth. It is possible, therefore, that the main effect of social integration on internal motivation will be muted for growth-oriented employees. It is possible that integration will facilitate internal motivation for employees who are not oriented toward growth and that isolation will facilitate internal motivation for those who are growth oriented.

If growth-orientation moderates the relationship between integration-isolation and internal motivation, it also may affect that between integration-isolation and job involvement. This effect, however, may operate differently in the two cases. While growth-orientation may facilitate the relationship between isolation and internal motivation, the absence of a growth-orientation may facilitate the relationship between isolation and job involvement. If employees seek to find meaning and identity at work, those who are isolated from work relationships are likely to turn to their tasks for a sense of identity and self-esteem. Those who are growth-oriented may find this through performance. Those who are not oriented
Some people in each department work under relatively isolated conditions. Others are more closely linked to their fellow employees. In the assembly department, for example, some people are engaged in pre-assembling materials prior to final assembly. They work apart from the main body of assemblers and apart from each other. Other assemblers are responsible for maintaining rooms where materials are stored and where they are introduced into the main assembly process. These rooms isolate these employees from others in the organization. The main body of assemblers, however, work closely together in the same area of the plant.

People in the packaging department also vary considerably in the extent to which they are integrated into networks of work relationships. Some are assigned to repacking work which takes place in an area removed from the main packaging activities. They work in relative isolation from the main body of packers. The packaging department is highly mechanized and many of the machines require that their operators man positions rather far removed from other packagers. One machine, for example, folds and seals boxes. It is located fairly far from the packagers who place assembled goods into the boxes. Other packagers operate packing machines. They are responsible for monitoring the machines and only rarely interact with fellow workers distributed at distant points along a conveyor which carries assembled goods through the machine. For the most part, however, packagers work closely together. They are arranged on either side of conveyors and pack assembled materials by hand as they came down the conveyor.

The other departments also have their isolates and their more integrated personnel. Some employees in the storage department work with
job characteristics such as variety, autonomy, feedback, identity, and significance are associated with internal motivation. It may therefore be necessary to control for these characteristics when testing for relationships between social integration—isolation and job involvement and internal motivation.

This possibility is made more salient by the fact that social integration—isolation may be an important determinant of employees' perceptions of job variety, autonomy, feedback, identity, significance and opportunity for interaction. For example, employees may view their jobs as having more variety, significance, feedback, and possibilities for interaction to the extent that they are well integrated into networks of work relationships. They may see their job as having variety, because they are likely to have a variety of contacts with others. The significance of their jobs—the impact they have on others—will be more visible; and they are more likely to be able to view first-hand how well or poorly their work meshes with that of others. They therefore may view their jobs as providing feedback. Finally, integration—isolation almost certainly will be associated with employees' opportunities to interact with others in the job. It seems essential, therefore, that job characteristics be included in the analysis as controls.

The Study

The expected relationships were assessed using data gathered from 522 employees of an assembly and packaging plant. The plant is divided into five departments: assembly, packaging, repair, sanitation, and storage. In addition to the five departments, individuals are employed in office work, personnel, quality control, etc.
1. There must be at least three members.

2. Members must have 50% or more of their links with other members of the cluster.

3. Each member must be linked to each other member by a path lying entirely within the group.

4. There can be no single link or individual which, if eliminated, would cause the cluster to fail to meet any of the above criteria.

For the purposes of the research reported here, Richard's definition of isolates was employed. If an employee were classified by Richard's procedure as a cluster member, a liaison, or as an other, that person was classified as integrated into the network of work relations. Individuals falling into classifications 2 and 3 were considered intermediate forms and were excluded from the analysis. Those falling into category 1 were considered isolates. In all, 122 isolates and 339 non-isolates were identified for comparison.

Measuring Job Characteristics, Job Involvement, Internal Motivation, and Growth-Orientation. These variables were measured using items developed for the Michigan Organization Assessment Package. These items were derived from a wide variety of published sources. They have been altered and refined on the basis of systematic comparisons across a wide variety of organizations (Seashore & Mirvis, 1979). Scale items for each construct, their means, standard deviations, and mean inter-item correlations are presented in the measurement appendix. A matrix of zero-order correlations among scales also is presented.

Analysis and Results

The data provide considerable support for the argument that involvement in the organization and internal motivation are distinctly different—in
others to unload, inventory, and arrange incoming material. Others operate fork lifts and work essentially alone distributing the new material to appropriate places in the warehouse. Some sanitation personnel work with others to fumigate and sanitize machinery. Others work mostly alone maintaining grounds or managing the uniform and locker rooms. In short, although most of the plant's employees are well integrated into relationships prescribed by workflow, several work in greater isolation. The plant therefore offers an excellent opportunity to study the impact of workflow isolation and integration on employee perceptions of job characteristics and on employee involvement and internal motivation.

Identifying Work Isolates and Non-Isolates. Employees in the plant were given the opportunity to complete a questionnaire in which they were asked to list the names of those with whom they worked most closely day-to-day. The 522 employees who responded to the questionnaire represented 68% of the total number of employees in the plant.

Work isolates were distinguished from non-isolates using a computer algorithm developed by Richards (1975). This algorithm operates on matrices of sociometric choices and distinguishes between (1) isolates, those who name no one and who are named by no one or who have only one link attaching them to one or a few others who are themselves isolated, (2) individuals who have one link to others who are themselves richly interconnected, (3) individuals who have links to two or more others who would be isolates were it not for this link, (4) "others," individuals who are richly interconnected but do not have links to an identifiable cluster of linked employees, (5) liaisons, those who link individuals in two or more clusters but who themselves are not members of any cluster, and (6) individuals who are members of an identifiable cluster. Clusters are identified as follows:
Interestingly, there is also a main effect of growth-orientation. This was not expected, but it seems plausible that growth-oriented employees are more internally motivated, that is, they are more likely to feel good when they perform well. While this has not always been documented in the literature, small but significant relationships between growth-orientation and internal motivation have been reported (e.g., Hackman and Oldham, 1975).

The interaction effects of social isolation and growth-orientation can be seen more clearly by comparing averages on employee motivation and involvement after the main effects have been partialled out. Those averages, standardized with a mean of zero and a standard deviation of 1, are presented in Table 2. The data in this table indicate that there are no significant differences in either internal motivation or job involvement for employees who are integrated into networks of work-based relationships. Among isolates, however, growth-oriented employees score significantly higher than others on internal motivation ($p < .05$) and lower on job involvement ($p < .05$).

**Job Characteristics.** It is clear from Table 1 that characteristics of jobs also play an important role in determining the degree of job involvement and internal motivation. Inspection of the average inter-item and inter-scale correlations in the measurement appendix suggests that measures of these attributes did not clearly distinguish among them. In some cases the average inter-item correlation is smaller than the correlation among the composite scales. However, it appears that different characteristics are associated with different outcomes. Variety, feedback, significance,
some cases perhaps alternative--responses to organizational life. They are uncorrelated and are affected differently by different factors.

Integration-Isolation and Growth-Orientation. Regressions of internal motivation and job involvement on the independent and control variables are presented in Table 1. In the discussion above, main effects and interaction effects had been expected. Specifically, it was expected that integration into networks of work relationships would be positively associated with internal motivation. This is born out by the data. This is consistent with the hypothesis that social integration can lead to internal motivation. Table 1 also indicates that there is no association between integration and job involvement. It had been anticipated, but was speculative, since the direction contradicts the formulations of Katz (1964) and Lodahl and Kejner (1965). It appears, however, there is no main effect of isolation on the degree of job involvement experienced by the employees studied here.

The predicted interaction effects, however, are visible in the data. Isolates who feel that growth and development on the job are important are more likely to be internally motivated than others. This is consistent with the thesis that, cut off from significant participation in work relationships, isolates who value growth will achieve a sense of self-esteem and identity by performing well, whatever their job. At the same time, isolates who do not value growth become more involved in their job than other employees, perhaps because they have no alternative source of identity at work.
are socially integrated are more likely than others to identify with their group's product. If so, they could see themselves as doing a whole piece of work. Socially integrated employees also feel greater freedom to decide what to do on the job. This is consistent with research on small groups which documents a positive relationship between centrality in the group and individual satisfaction (Shaw, 1964). The explanation most frequently given for this is that the more central people feel a greater degree of freedom and autonomy on the job (Leavitt, 1951; Trow, 1957; Mulder, 1959).³

The relationship between integration-isolation and job characteristics and between job characteristics and employee responses suggests that integration-isolation may have indirect effects on job involvement and motivation in addition to the main and interaction effects discussed earlier. Besides increasing internal motivation and decreasing job involvement (for growth-oriented employees), it appears that integration increases variety, feedback and significance which in turn increases internal motivation. Significance also increases job involvement. Integration also increases identity and, perhaps, autonomy which in turn increase job involvement. Integration, therefore, seems to have a negative direct effect (for growth-oriented employees) but a positive indirect effect on the extent to which employees are involved in their jobs.

Discussion

The results suggest that social factors play a role along with job characteristics in determining the degree to which employees are internally motivated and involved in their jobs. All hypothesized relationships save the negative direct effect of integration on job involvement received support from the data.
and, almost significantly, required interaction are associated with internal motivation. This is consistent with relationships hypothesized by Hackman and Oldham (1976). Autonomy, identity, and significance, on the other hand, are associated with job involvement. Of all six job characteristics, only significance is associated with both dependent variables.²

Although job characteristics were entered into the regressions reported in Table 1 as controls, it is possible to view them as reflecting indirect effects of social integration-isolation. This would be the case to the extent that integration-isolation can be viewed as causing employees' perceptions of characteristics of their jobs. As noted earlier, for example, employees may view their jobs as having more variety, significance, feedback, and required interaction to the extent that they are integrated rather than isolated. To determine whether or not this was the case for the employees studied here, means for each job characteristic were observed for isolates and for their more integrated counterparts. These are presented in Table 3.

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Insert Table 3 about here
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From this table it is clear that employees who are isolated from networks of work relationships report less identity, variety, feedback, significance, and required interaction. They also report less autonomy, but this difference does not attain a generally accepted level of significance (p ≤ .05). Relationships between integration-isolation and variety, feedback, significance and required interaction had been expected. The reasons why integration-isolation and identity and autonomy are associated, however, are more difficult to specify. It is possible that employees who
Effective workflow designs may have to balance direct effects of integration-isolation with indirect ones. They also may have to take interaction effects (social integration of the position and growth-orientation of the employee) into account when making work assignments. Finally, they will have to consider possible trade-offs between internal motivation and job involvement. Both variables have been shown to be associated with positive outcomes such as satisfaction, lowered absenteeism and turnover, and greater effort and performance (Porter and Steers, 1973; Wiener and Gechman, 1977). Their relative costs and benefits, however, should be investigated in future research. Cummings and Mauring (1977), for example, found that job involvement was negatively associated with supervisors' ratings of employee effectiveness. Perhaps employees who identify with their jobs are less willing to work out of classification than are those who get more of their identity from other sources. Before workflow designs can be properly specified, such relative costs and benefits of job involvement and of internal motivation must be identified.

In addition to dealing with tradeoffs between internal motivation and job involvement, much more work needs to be done to understand the relationship between social integration-isolation and these and other employee responses. This work could overcome several of the limitations of the research presented here. For example, the measure of integration-isolation used here does not allow the researcher to distinguish among several alternative forms of work-based relationships. The results reported here could be due to differences between isolates and non-isolates in terms of access to information, participation in decision-making, access to personal friendships, differential patterns of work interdependence, or to any
As noted earlier, there seem to be practical limitations on the extent to which jobs are likely to be redesigned in accordance with social science principles. This particularly may be the case when substantial economies of scale or of specialization can be realized. It may be, however, that manipulating social factors is relatively compatible with employees' behavior styles and with established practice. There is no reason, for example, to expect that such changes would decrease the degree to which tasks are specialized. Jobs per se need not be redesigned; rather, patterns of relationships among employees can be manipulated without either job enlargement or job enrichment. These patterns of relationships may be planned and implemented by designing the flow of work to realize desired levels of employee job involvement and internal motivation.

While the data indicate that an approach based upon workflow design is feasible, they also indicate that the effect designing workflows would be rather small. Integration-isolation does not explain much variance in either dependent variable. The data also suggest that designing workflows to effect the desired employee response is likely to be quite complex. While internal motivation may be enhanced to the extent that employees are given jobs which locate them in socially central positions, this can simultaneously result in decreased job involvement for employees who do not value growth. Likewise, growth-oriented employees may be left alone to encourage the development of internal motivation. However, this also may reduce their level of job involvement. Simultaneously, isolation seems to decrease the extent to which employees view their jobs as autonomous, significant, requiring interaction, and characterized by identity, variety, and feedback. Indirectly, therefore, isolation may decrease internal motivation and job involvement.
This hypothesis, of course, must be assessed in other organizations using employees with different characteristics. The sample studied here is distinctive in many ways. For example, the average level of education is less than that of a high school graduate. With additional work in other settings, however, we may one day learn enough to be able intelligently to design social relationships at work.
number of other factors. The measure also is a simple dichotomy. Social integration, however, should be measured by an interval or at least by an ordinal scale. The absence of a better measure may account, in part, for the relatively small amounts of variance explained in the dependent variables. It also is likely, however, that job involvement and internal motivation are complex phenomena with many determinants, none of which by itself will ever account for much variance. A better measure of integration-isolation, however, probably will account for more variance than the one used here.

Despite these shortcomings, it seems clear that job involvement is distinctly different from internal motivation. Variables which seem to lead to internal motivation do not appear to facilitate job involvement; some of them actually inhibit it. Job involvement seems to be an alternative source of identification and meaning to internal motivation. Similar ideas have been advanced by others. Sheldon (1971) argues that a professional orientation is an alternative to one centered on the organization. Brown (1969) talks about competing sources of identification, and Dubin (1956) posited long ago that employees have alternative sources of life interest. It is not argued here, however, that job involvement and internal motivation are alternatives in the sense that having one precludes having the other. One can be involved with one's job and still be internally motivated. The data presented here suggest only that when one is precluded from significant work-based social relationships, one may seek internal motivation or job involvement as alternative sources of identity and self-esteem. Which alternative is selected will depend upon the employee's orientation toward growth.
REFERENCES


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Footnotes

1. This section deals with a variable which often implies a theory of motivation based upon the desire to satisfy individual needs. Specifically, the concept of growth needs—the importance individuals place upon growth and development at work—has been viewed as reflecting individual need states (e.g., Hackman and Oldham, 1975). Recently, Salancik and Pfeffer (1978), have argued that what have been called needs may be viewed as post-hoc cognitive or emotional adjustments which function to explain or to rationalize behavior—such as loyalty or commitment—which cannot be justified purely on the basis of extrinsic rewards. It is neither our intention nor our desire to enter into this debate. We assume, however, that whether feelings or perceptions are post-hoc rationalizations or results of individual needs, some individuals do feel loyalty and commitment and feel satisfaction when they do a good job. Regardless of the causal dynamics, they come to view themselves as involved or uninvolved or as someone who views growth and development at work as more or less important. Moreover, these self-images affect subsequent behavior. When referring to the importance employees place upon growth and development at work, therefore, we do not intend implicitly to endorse either a needs-based or a cognitively based perspective. The term "growth orientation" will be used here to refer to how employees view themselves. We are not concerned here with how this view comes about.

2. The direction and strength of these relationships did not vary significantly for employees with high as opposed to low growth-orientation.

3. The author is indebted to Daniel Brass for this idea.

4. Integrated employees who are not growth-oriented may become more involved in the organization, a possibility not investigated here.

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C. Identity

On my job, I produce a whole product or perform a complete service ................................................................. (strongly disagree to strongly agree)

How much does your job involve your producing an entire product or an entire service?


My job involves doing only a small part the entire product or service; it is also worked on by others or by automatic equipment and I may not see or be aware of much of the work which is done on the product or service.

My job involves doing a moderate sized 'chunk' of work; while others are involved as well, my own contribution is significant.

My job involves producing the entire product or service from start to finish, the final outcome of the work is clearly the result of my work.

D. Significance

A lot of people can be affected by how well I do my work.

In general, how significant or important is your job; that is, are the results of your work likely to significantly affect the lives or well-being of other people?


Not very significant; the outcomes of my work are not likely to have important affects on other people.

Moderately significant

Highly significant; the outcomes of my work can affect other people in very important ways.
MEASUREMENT APPENDIX

I. Job Characteristics (7 point scales)

A. Variety

I get to do a number of different things in my job.
(strong disagree to strongly agree)

How much variety is there in your job?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little; I do pretty much the same things over and over, using the same equipment and procedures almost all the time.</td>
<td>Moderate variety</td>
<td>Very much; I do many things, using a variety of equipment and procedures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Autonomy

How much freedom do you have on your job? That is, how much do you decide on your own what you do on your job?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very little; there are few decisions about my job which I can make for myself.</td>
<td>A moderate amount. I have responsibility for deciding some of the things I do, but not others.</td>
<td>Very much; there are many decisions about my job which I can make by myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is basically my own responsibility to decide how my job gets done ..........................
(strongly disagree to strongly agree)

I have the freedom to decide what I do on my job ..........................
(strongly disagree to strongly agree)
III. The Extent to Which Employees Value Growth and Development on the Job (Growth-Orientation). (7 point scale, moderately important to extremely important)

How important is ...

...the chances you have to accomplish something worthwhile?
...the chances you have to do the things you do best?
...the chances you have to take part in making decisions?
...the opportunity to develop your skills and abilities?
...the chances you have to do something that makes you feel good about yourself as a person?
E. Feedback

Just doing the work required by my job gives me many chances to figure out how well I am doing.  
(strongly disagree to strongly agree)

As you do your job, can you tell how well you're performing?


Not at all; I could work on my job indefinitely without ever finding out how well I am performing unless somebody tells me.  
Moderately; sometimes by just doing the job I can find out how well I'm performing, sometimes I can't.  
A great deal; I can almost always tell how well I'm performing just by doing my job.

F. Required Interaction

To do my job well, I have to work closely with other people.  
(strongly disagree to strongly agree)

II. Job Involvement, Organization Involvement, and Internal Motivation (7 point scales)

A. Job Involvement (strongly disagree to strongly agree)

The most important things which happen to me involve my job.

I live, eat, and breathe my job.

B. Internal Motivation (strongly disagree to strongly agree)

Doing my job well gives me a good feeling.

I get a feeling of personal satisfaction from doing my job well.
Table 1

Regressions of Internal Motivation and Job Involvement on Employee Integration into Networks of Work Relationships and Job Characteristics

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Internal Motivation</th>
<th>Job Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t</td>
</tr>
<tr>
<td>Work Integration</td>
<td>.18</td>
<td>2.80</td>
</tr>
<tr>
<td>Growth-Orientation</td>
<td>.12</td>
<td>2.23</td>
</tr>
<tr>
<td>High Growth-Orientation &amp; Isolation*</td>
<td>.18</td>
<td>2.70</td>
</tr>
<tr>
<td>Low Growth-Orientation &amp; Isolation**</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Control Variables

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Autonomy</td>
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<td>.73</td>
<td>.467</td>
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<td>0.29</td>
<td>.774</td>
<td>.11</td>
<td>1.96</td>
<td>.057</td>
</tr>
<tr>
<td>Variety</td>
<td>.11</td>
<td>2.09</td>
<td>.037</td>
<td>-.02</td>
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<td>.697</td>
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<tr>
<td>Feedback</td>
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<td>2.33</td>
<td>.020</td>
<td>.05</td>
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<td>.422</td>
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<tr>
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<td>2.90</td>
<td>.004</td>
<td>.12</td>
<td>2.21</td>
<td>.028</td>
</tr>
<tr>
<td>Required Interaction</td>
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<td>1.77</td>
<td>.078</td>
<td>-.03</td>
<td>.60</td>
<td>.552</td>
</tr>
</tbody>
</table>

MR = .45
F = 10.33
p ≤ .0001
N = 383

MR = .32
F = 4.86
p ≤ .0001
N = 396

*2 = high growth-orientation (median break) and isolation.
1 = other

**2 = low growth-orientation (median break) and isolation.
1 = other
Means, Standard Deviations, Average Inter-Item Correlations and Inter-Scale Correlations
(N = 379 Cases with Complete Data)

<table>
<thead>
<tr>
<th></th>
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<th>s.d.</th>
<th>$\bar{r}$</th>
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<tbody>
<tr>
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<td>1.5</td>
<td>.40</td>
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<tr>
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<td>1.6</td>
<td>.31 .3869</td>
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<tr>
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<td>3.4</td>
<td>.40 .3831</td>
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<tr>
<td>Feedback</td>
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<td>1.3</td>
<td>.24 .3522</td>
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<tr>
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<td>1.4</td>
<td>.30 .1512</td>
</tr>
<tr>
<td>Required</td>
<td>5.4</td>
<td>1.7</td>
<td>— .1219</td>
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<td>Interaction</td>
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<tr>
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<td>1.8</td>
<td>.47 .1121</td>
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<tr>
<td>Motivation</td>
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<td></td>
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<tr>
<td>Job Involvement</td>
<td>3.1</td>
<td>1.7</td>
<td>.51 .2073</td>
</tr>
</tbody>
</table>
Table 3

Mean Reported Score on Job Characteristics for Isolates and Non-Isolates

<table>
<thead>
<tr>
<th></th>
<th>Isolates X/N</th>
<th>Non-Isolates X/N</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autonomy</td>
<td>3.62/122</td>
<td>3.90/340</td>
<td>2.04</td>
<td>.037</td>
</tr>
<tr>
<td>Identity</td>
<td>4.09/117</td>
<td>4.53/334</td>
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<tr>
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<td>8.40/102</td>
<td>9.17/310</td>
<td>4.15</td>
<td>.042</td>
</tr>
<tr>
<td>Feedback</td>
<td>5.10/123</td>
<td>5.37/341</td>
<td>3.71</td>
<td>.054</td>
</tr>
<tr>
<td>Significance</td>
<td>5.36/122</td>
<td>5.68/340</td>
<td>4.34</td>
<td>.028</td>
</tr>
<tr>
<td>Required Interaction</td>
<td>5.03/118</td>
<td>5.52/338</td>
<td>2.82</td>
<td>.005</td>
</tr>
</tbody>
</table>
Table 2

Residual Adjusted Average Job Involvement and Internal Motivation Scores for Different Conditions of Work Integration and Employees’ Growth-Orientation*

<table>
<thead>
<tr>
<th>Growth-Orientation (median break)</th>
<th>Work Integration</th>
<th>Work Isolation</th>
</tr>
</thead>
<tbody>
<tr>
<td>high</td>
<td>internal motivation = -.01</td>
<td>internal motivation = .19</td>
</tr>
<tr>
<td></td>
<td>job involvement = .07</td>
<td>job involvement = -.23</td>
</tr>
<tr>
<td></td>
<td>(N = 147)</td>
<td>(N = 48)</td>
</tr>
<tr>
<td>low</td>
<td>internal motivation = -.01</td>
<td>internal motivation = -.20</td>
</tr>
<tr>
<td></td>
<td>job involvement = -.06</td>
<td>job involvement = .24</td>
</tr>
<tr>
<td></td>
<td>(N = 159)</td>
<td>(N = 44)</td>
</tr>
</tbody>
</table>

*Scores adjusted with mean of 0 and standard deviation of 1.0.