Proximal Job Characteristics, Feelings of Empowerment, and Intrinsic Motivation: A Multidimensional Model[1]

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We examined relations between job characteristics, empowerment, and intrinsic motivation among technical and telemarketing workers. Empowerment was conceptualized as a gestalt of 4 psychological dimensions: autonomy, competence, meaningfulness, and impact. It was hypothesized that the various dimensions of empowerment would mediate the relationship between job characteristics, such as feedback and autonomy support, and intrinsic motivation at work. A path analysis supported the hypothesis, revealing that different job characteristics were predictive of different aspects of empowerment, and that aspects of empowerment differentially affected intrinsic motivation. The results point to the value of considering empowerment as a multidimensional construct.

Empowerment is a term used to describe the on-the-job experiences of individual workers. The exact nature of the feelings that underlie the experience of empowerment has been open to debate, however, as researchers have variously suggested that empowerment reflects feeling effective, feeling in control, and feeling influential. Although feelings of effectiveness, control, and influence are no doubt interrelated, there are also clear distinctions to be made among them.

Thomas and Velthouse (1990) and Spreitzer (1992) brought some much-needed clarity to this area by suggesting that empowerment should be conceptualized

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as a gestalt of four types of feelings that are related, yet somewhat independent of one another. The four types are: (a) *autonomy*, defined as a sense of freedom in making choices about how to do one's work, and the resulting feelings of personal responsibility for these choices; (b) *competence*, defined as the belief in one's ability to perform a job successfully; (c) *meaningfulness*, defined as the perceived value of one's job in relation to one's personal beliefs, attitudes, and values; and (d) *impact*, defined as the belief that one is producing intended effects and has control over desired outcomes through one's task behavior (Spreitzer, 1992; Thomas & Velthouse, 1990). These four aspects of empowerment were conceptualized by Thomas and Velthouse as cognitive components of intrinsic task motivation. According to their model,

> environmental events provide data to the individual about the consequences of ongoing task behavior and about conditions and events relevant to future behavior. This data is [sic] seen as shaping the individual's task assessments regarding impact, competence, meaningfulness, and choice. These task assessments, in turn, energize and sustain the individual's behavior. (p. 669)

This model therefore incorporates subjective and objective environmental appraisals in explaining experiences of interest and enjoyment at work. The interpretation that is inherent in task assessment supposedly varies according to a person's global assessments (generalizations from past task assessments) and interpretive style (e.g., attributions).

The model defines intrinsic task motivation as the experience of interest and enjoyment when performing a work task, without this performance being controlled by external contingencies, such as rewards and punishments. It follows Deci and Ryan's (1987) self-determination theory in proposing that feelings of competence and self-determination are central to intrinsic motivation. Thomas and Velthouse (1990) argued, however, that intrinsic motivation at work is different from intrinsic motivation for a leisure activity. They contended that intrinsic task motivation must include a sense of purpose, which they suggested can be tapped by inquiring about feelings of meaningfulness and impact.

Thomas and Velthouse also equated feelings of empowerment with intrinsic motivation, in the sense that these feelings are rewarding in themselves (Thomas & Tymon, 1994). However, at the same time, they argued that the four aspects of empowerment are "presumed to be a proximal cause of intrinsic task motivation and satisfaction" (Thomas & Velthouse, 1990, p. 668). Deci and Ryan (1991), as well, argued that feelings of competence and autonomy are prior to the experience of intrinsic motivation. According to their self-determination theory, these feelings must be fulfilled in order to experience intrinsic motivation. Intrinsic

motivation is, however, not conceptually the same as its antecedents: It is the resulting will and energy that drives behavior, whereas the feelings of competence and the like that precede it are cognitive evaluations of the context and of oneself. The more positive these evaluations, the more energized one is expected to be. The model proposed herein followed this second conceptualization of intrinsic motivation, using feelings of empowerment as its antecedents.

To test this multidimensional conceptualization of empowerment, Spreitzer (1992) developed scales to assess each of the four dimensions of empowerment. The items for these scales were adapted from previous work-related scales of autonomy, competence, meaningfulness, and impact developed by Hackman and Oldham (1975), Jones (1986), Tymon (1988), and Ashforth (1989), respectively. A confirmatory factor analysis supported the divergent and convergent validity of the four subscales, as well as their gestalt arrangement. Thus, when applied to workers' experiences, it appears that empowerment is best conceptualized as a multidimensional construct that includes feelings of autonomy, competence, meaningfulness, and impact. Thomas and Tymon (1994) also found support for a four-dimensional construct of empowerment.

The focus in Spreitzer's (1992) study was on demonstrating the multidimensionality of empowerment, and its mediating effects on the relations between social–structural context and individual behavior. She hypothesized that distal organizational factors such as a hierarchical structure, sociopolitical support, and organizational culture would influence managers' feelings of empowerment (Spreitzer, 1992). Her results demonstrated that sociopolitical support and access to information were positively associated with all four components of empowerment, and that supervisory span of control and a culture that values individual initiative were only positively associated with feelings of competence. Finally, Spreitzer's results demonstrated that the competence and impact aspects of empowerment were related to managerial effectiveness.

Spreitzer's (1992) study did not, however, consider the role of more proximal organizational influences, such as the specific motivational qualities of the jobs people performed. It also did not investigate the effects of empowerment on intrinsic task motivation, which is at the core of Thomas and Velthouse's (1990) model. The present study expanded upon Spreitzer's work by considering how the various components of empowerment mediate the effects of different job characteristics on intrinsic motivation.

Job Characteristics

Job characteristics theory, proposed by Hackman and Oldham (1975), is intended to provide a framework that explains how job characteristics influence workers' motivation. The present study assessed six of the job dimensions

outlined in their theory. These are: (a) *skill variety*, defined as the opportunity to use many skills and talents at work; (b) *task identity*, defined as the opportunity to identify a whole piece of work; (c) *task significance*, defined as the recognition that a job has impact on others; (d) *autonomy support*, defined as the opportunity for freedom, independence, and discretion; (e) *job feedback*, defined as the information about one's performance obtained from job activities; and (f) *feedback from agents*, defined as the information about one's performance obtained from supervisors and coworkers.

Hackman and Oldham (1975) proposed that certain job dimensions will lead to particular psychological states, which will then lead to intrinsic motivation. The theory hypothesizes that skill variety, task identity, and task significance combine in an additive fashion to influence feelings of meaningfulness. Autonomy support should enhance feelings of responsibility, while feedback from the job should enhance knowledge of results. Their model did not offer predictions as to the effects of feedback from agents because they believed that it would not influence peoples' affective and behavioral reactions. Many studies have nonetheless used it and obtained significant relationships with psychological outcomes, such as perceptions of the work environment (Ferris & Kacmar, 1992), work satisfaction and competence feelings (Kelloway & Barling, 1991), and quality of work life (Ayree, 1992).

In the present study, we evaluated the effects of the six job characteristics on the four aspects of empowerment. Skill variety, task identity, and task significance were combined in order to form an index of overall task significance, and this index was our first predictor variable. In their validation study of the Job Diagnostic Survey, Hackman and Oldham (1975) reported significant correlations among these three characteristics. Autonomy support and feedback from the job were included as two additional predictor variables, and feedback from others as a last predictor variable.

There is considerable evidence that variations in the job characteristic outlined by Hackman and Oldham (1975) exert an influence on people's feelings and motivation at work. Except for the few studies mentioned above, the gist of the research has focused on examining the overall complexity of jobs, as calculated by combining the first five of the six aforementioned job dimensions, in relation to various outcomes. An early review of the research using the Job Diagnostic Survey revealed that high job complexity was associated with enhanced intrinsic motivation, satisfaction, and involvement, as well as diminished absenteeism, alienation, and role conflict (Aldag, Barr, & Brief, 1981). More recent investigations have found positive relations between job complexity and satisfaction (Bateman & Strasser, 1984; Ferris & Gilmore, 1984; Gardner, 1986; Griffin, Bateman, Wayne, & Head, 1987; Kelloway & Barling, 1991; Loher, Noe, Moeller, & Fitzgerald, 1985; Pierce, Gardner, Cummings, & Dunham,

1989; Zaccaro & Stone, 1988), intrinsic motivation (Pierce et al., 1989), organizational commitment (Bateman & Strasser, 1984; Dunham, Grube, Castaneda, 1994; Naumann, 1993; Pierce et al., 1989; Shore, Thornton, & McFarlane-Shore, 1990), organizational citizenship behavior (Farh, Podsakoff, & Organ, 1990), and involvement (Shore et al., 1990). Others have found negative relations between job complexity and arousal (Gardner, 1986), role stress (Bateman & Strasser, 1984), absenteeism (Mowday & Spencer, 1981), emotional exhaustion (Gaines & Jermier, 1983), and turnover intentions (Naumann, 1993; Spector & Jex, 1991).

Only two studies directly examined the relation of job complexity to aspects of empowerment. One of them, by Landeweerd and Boumans (1994), found a positive relation between job complexity and experienced meaningfulness. These authors, however, did not specify which particular job characteristics were more strongly associated with meaningfulness. The other, by Kelloway and Barling (1991), found a positive relation between job complexity and perceived competence, and reported that three specific job dimensions were significant predictors: skill variety, autonomy support, and feedback from the job.

The present study tested the links between the particular job characteristics and the four aspects of empowerment. It was expected that task significance would positively influence meaningfulness, and that autonomy support would positively influence autonomy and impact. This last prediction was made because being offered autonomy support supposedly leads individuals to behave in a more choiceful manner, which increases one's feelings of responsibility for one's actions (Deci, 1995; Hackman & Oldham, 1975). Thus, feeling responsible could increase one's perceived impact through work behavior. It was also expected that feedback from the job would influence competence and impact, and that feedback from others would influence competence and autonomy.

Regardless of the precise linkages between job characteristics and aspects of empowerment, the value of conceptualizing empowerment as a gestalt of four constructs would be supported if autonomy, competence, meaningfulness, and impact were differentially related to the job characteristics. Stated differently, the test of the multidimensionality of empowerment should be to demonstrate distinctive relations of each of the four aspects of empowerment with various predictor and outcome variables.

Intrinsic Motivation

The available evidence indicates that empowerment facilitates commitment, creativity, productivity, satisfaction, and intrinsic motivation (Conger, 1989; Hackman & Lawler, 1974; Hackman & Oldham, 1975). However, these links

have not been demonstrated using a multidimensional approach to empowerment. It is therefore not clear whether autonomy, competence, meaningfulness, or impact is most predictive of positive outcomes such as higher levels of intrinsic motivation. Thomas and Velthouse (1990) also predicted additive effects of these components. The present study tested the relative contributions of autonomy, meaningfulness, impact, and competence, to the experience of intrinsic motivation at work.

Research using self-determination theory (Deci & Ryan, 1991) as a framework has demonstrated the linkages between competence, autonomy, and intrinsic motivation. For example, Vallerand and Reid (1984), Losier and Vallerand (1994), and Reeve and Deci (1996) clearly showed that feelings of competence directly and positively influence intrinsic motivation. Zuckerman, Porac, Lathin, Smith, and Deci (1978) demonstrated that manipulating feelings of autonomy influenced intrinsic motivation (see also Deci, 1971; Koestner, Ryan, Bernieri, & Holt, 1984). At work, the same effects were obtained when observing the autonomy support of managers toward their employees (Deci, Connell, & Ryan, 1989). In the present study, it was predicted that the four aspects of empowerment would be positively related to intrinsic motivation.

Overview of the Present Study

The overarching purpose of the present study was to assess Thomas and Velthouse's (1990) model predicting the relations between the four aspects of empowerment and environmental events, in this case proximal job characteristics, as well as with intrinsic task motivation. We planned to administer Spreitzer's (1992) Empowerment Scale, along with the Job Diagnostic Survey (Hackman & Oldham, 1975) and a Work Motivation Scale (Blais, Lachance, Brière, Riddle, & Vallerand, 1993), to service employees of a large telecommunication company. The latter scale measures three types of intrinsic motivation at work; through accomplishment, stimulation, and knowledge acquisition.

Because Spreitzer (1992) only validated her scales with managers, it would be useful to demonstrate that the four factors also emerge with nonmanagerial workers. Thus, another objective of the current study was to replicate Spreitzer's findings regarding the structure of feelings of empowerment, in order to generalize them to nonmanagerial service workers.

Our predictions were that (a) we would replicate Spreitzer's (1992) four-factor structure of empowerment; (b) proximal job characteristics would differentially affect various aspects of empowerment; and (c) those aspects of empowerment, in turn, would differentially affect intrinsic motivation for work activities by intervening between job characteristics and intrinsic motivation.

Method

Subjects

In the spring of 1995, employees from two different departments of a Canadian telephone company completed a series of questionnaires on their motivation at work. The sample consisted of 105 technicians, 72 sales representatives, 13 clerks, and 9 managers. All workers were unionized, except for the managers, and they were all native French speakers.

The work of the technicians consisted of installing, removing, and testing transmission and energy equipment. They worked in small self-managed groups. The telemarketing department was responsible for promoting and selling the company's products and services. The jobs included office-related tasks and a great deal of interaction with clients. The sales representatives' performance records of sales were closely monitored. The clerks handled the clerical work, while the managers were in charge of directing the activities of the clerks and sales representatives.

Procedure

The employees' managers were informed of the purpose of the study and were asked to announce the opportunity to participate in a study on motivation at work. All technicians and telemarketing employees received envelopes containing a series of questionnaires with a cover letter explaining the study and a consent form stressing the fact that their participation was voluntary. The questionnaires included the Job Diagnostic Survey, the Empowerment Scale, and the Work Motivation Scale. The items on the Job Diagnostic Survey, and the Empowerment Scale were translated to French by two bilingual psychology graduate students. Participants were asked to mail back the questionnaires directly to the university once completed, in order to ensure confidentiality. Aggregate results were fed back to the company.

Measures

The Job Diagnostic Survey. Hackman and Oldham (1975) designed the Job Diagnostic Survey to assess core job characteristics. We only used Sections I and II of the survey. The first section contains six items measuring the extent to which workers feel the characteristics are present in their job, using a 7-point scale. The second contains 12 statements about job characteristics on which workers must agree or disagree, using a 7-point Likert scale. An example of the items is "Supervisors often let me know how well I am doing on my job" (Feedback from the job). Subscale scores were created by averaging items

measuring the same construct across the two sections. Previous studies supported the internal consistency of the subscales, with coefficients ranging from .59 for task identity to .78 for feedback from agents.

The factor structure of the Job Diagnostic Survey has been examined in numerous studies. These studies suggested that the dimensionality of the survey was not stable across samples and did not support the a priori structure proposed in Hackman and Oldham's (1975) theory (Fried & Ferris, 1986; Harvey, Billings, & Nilan, 1985; Lee & Klein, 1982). Idaszak and Drasgow (1987) revised the Job Diagnostic Survey and found it to be more reliable than the old version (Cordery & Sevastos, 1993). However, Kulik, Oldham, and Langner (1988) demonstrated that although the revised version supported the a priori structure of the job characteristics, it did not improve the predictions made with the instrument about intrinsic motivation, satisfaction, and productivity. Since the older version has been more widely used and has been validated in diverse contexts, it was used in the present study.

The Empowerment Scale. Spreitzer's (1992) multidimensional measure of empowerment is a self-report scale that includes items adapted from previous work-related scales of autonomy, competence, meaningfulness, and impact developed by Hackman and Oldham (1975), Jones (1986), Tymon (1988), and Ashforth (1989), respectively. Each subscale contains three statements concerning the extent to which one experiences different feelings when performing one's job. Each is measured on a 7-point scale. An example of the items is "The work I do is meaningful" (meaningfulness). All of the items can be seen in Table 1.

Spreitzer (1992) administered her multidimensional empowerment scale to 393 middle managers of a Fortune 500 organization. Composite reliabilities for each subscale ranged from .79 for competence to .88 for impact. Factor analyses supported the multidimensionality of empowerment by yielding four factors with factor loadings ranging from .66 to .90. The validity of the scales was shown by their distinctive pattern of relations to distal organizational factors, such as sociopolitical support and organizational culture.

The Work Motivation Scale. Blais et al.'s (1993) Work Motivation Scale was administered in order to assess the participants' intrinsic motivation at work. It assesses the degree to which, and the manner in which, people are motivated at work. The theoretical background underlying the instrument stems from Deci and Ryan's (1991) self-determination theory. The subscales for intrinsic motivation through accomplishment, stimulation, and knowledge acquisition include four items each, measured on a 7-point scale. Examples of the items are (translated from French to English):

> Why do you do this type of work? For the satisfaction I feel when I
> take up interesting challenges in this work (accomplishment);

Table 1

Factor Loadings Resulting From the Principal Components Analysis of the Empowerment Items

	Factor loadings			
Items	Factor 1	Factor 2	Factor 3	Factor 4
I am confident in my ability to do my job	.86[a]	.03	.09	-.14
I am self-assured about my capability to do my work	.88[a]	.09	.06	-.07
I have mastered the skills necessary for my job	.73[a]	.03	.13	.13
My impact on what happens in my team is large	.10	.82[a]	.08	.19
I have a lot of control over what happens in my team	.06	.86[a]	.20	.18
I have significant influence over what happens in my team	.07	.87[a]	.24	.20
The work I do is meaningful	.15	.15	.84[a]	.22
The work I do is important to me	.10	.23	.87[a]	.04
My job activities are personally meaningful to me	.09	.11	.84[a]	.16
I have significant autonomy in determining how to do my job	.60	.14	.07	.46[a]
I can decide on my own how to go about doing my work	.02	.25	.18	.86[a]
I have considerable opportunity for freedom in how to do my job	.02	.27	.20	.85[a]

[a]Item loadings defining factors.

because I have fun learning new things on this job (knowledge); for the intense pleasure I feel at doing interesting tasks in this work (stimulation).

Blais et al. (1993) validated their scale using 974 employees, and demonstrated three distinct intrinsic motivation factors through a confirmatory factor

analysis, with phi correlations among them ranging between .73 and .84. These subscales correlated negatively with burnout and depersonalization measures. Another study done with university professors found negative relationships between intrinsic motivation and stress and burnout, as well as a positive relationship between intrinsic motivation and quality of work life (Blais & Lachance, 1994). In the present study, the 12 items were averaged to form an index of general intrinsic motivation.

Results

Preliminary Analyses

Eighty-four technicians, 57 sales representatives, 13 clerks, and 6 managers returned completed questionnaires. The response rate was 80% for the technicians, 79% for sales representatives, 100% for clerks, and 67% for managers. It is particularly important to have high response rates in studies examining variables related to motivation, because people with higher motivation levels are usually more likely to respond, and may answer differently from people with lower motivational levels. The response rates obtained in the present study were more than adequate.

The mean age of technicians was 42.3 years, they had an average of 20.3 years of tenure in the company, and were all men. The mean age for sales representatives was 30.5 years, they had an average of 9.5 months of tenure in the company, and 67% were men. The mean age for clerks was 30.8 years, with an average of 4.2 years with the company, and 69% were women. Finally, the mean age for managers was 33.3 years, their average tenure in the company was 8.2 years, and 67% were women.

Table 2 provides the means, standard deviations, and internal reliability coefficients for each subscale of the Job Diagnostic Survey, the Empowerment Scale, and the Motivation at Work Scale.

The Job Diagnostic Survey subscales' reliabilities ranged from .74 for task significance to .85 for skill variety. In general, these internal consistency estimates were somewhat higher than those obtained by Hackman and Oldham (1975) in their validation study of the Job Diagnostic Survey. The four subscales of the Empowerment Scale had internal consistency coefficients ranging from .74 for autonomy to .87 for impact, and the intrinsic motivation measure had a coefficient of internal consistency of .95.

The Multidimensional Nature of Empowerment

Confirming the multidimensional nature of empowerment, a principal components factor analysis was performed on the Empowerment Scale items, which

Table 2

Means, Standard Deviations, and Internal Consistencies of Scales

Scales (number of items)	M	SD	Internal consistency
Job Diagnostic Survey			
Job autonomy (3)	4.65	1.72	.84
Feedback from the job (3)	4.44	1.29	.62
Feedback from agents (3)	4.14	1.50	.80
Empowerment Scale			
Autonomy (4)	5.03	1.34	.74
Competence (4)	6.13	0.77	.79
Impact (4)	4.30	1.46	.87
Meaningfulness (4)	5.32	1.27	.86
Motivation at Work Scale			
Intrinsic motivation (12)	4.70	1.43	.95

Note. All variables were measured on a 7-point scale. Internal consistencies were calculated using Cronbach's alpha.

yielded four factors that were very similar in factor loadings to those obtained by Spreitzer (1992). As can be observed in Table 2, nearly all items loaded exclusively on their appropriate factor with coefficients ranging from .46 to .88. The subscales were all significantly positively correlated among each other ($p <$ .01), with correlations ranging from .19 to .51, which means that the four components of empowerment share some common variance, suggesting an overarching structure that Thomas and Velthouse (1990) called *empowerment.*

Prediction of Intrinsic Motivation From Job Characteristics and Empowerment

    A path analysis was performed in order to test the hypothesized model, which proposes that the job characteristics differentially affect the four aspects of empowerment, which in turn differentially affect intrinsic motivation. The model submitted to the path analysis included data from 157 participants and explained 68% of the variance in intrinsic motivation. It is presented in Figure 1.[3]

    [3]Nearly identical results were obtained when the model was resubmitted with tenure included as a predictor variable.
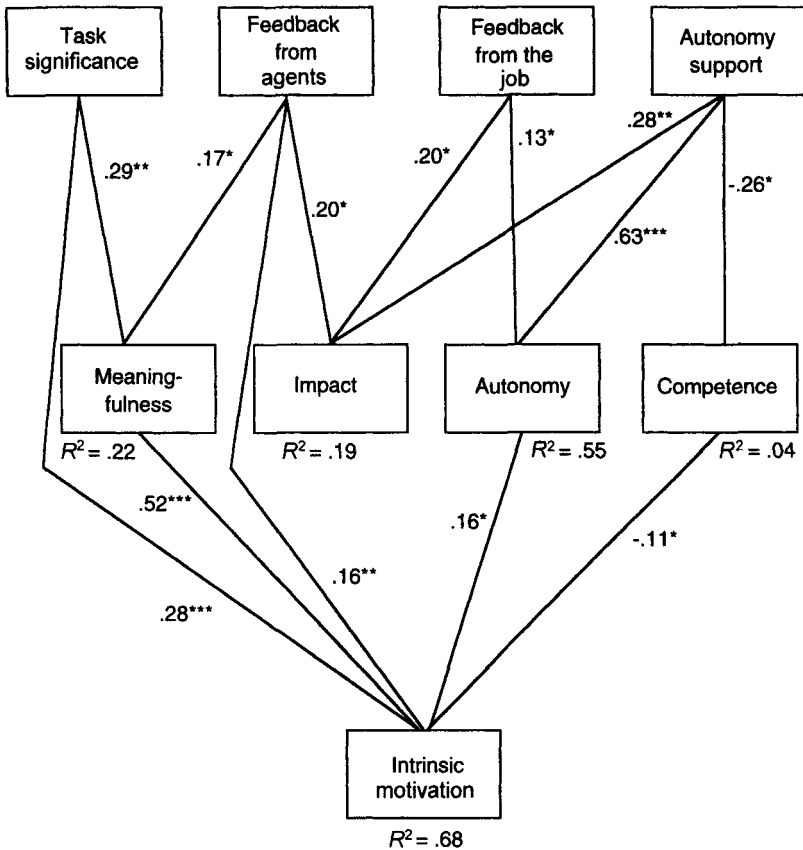
Figure 1. Standardized beta coefficients and variance accounted for R^2 resulting from the path analysis. *$p < .05$. **$p < .01$. ***$p < .001$.

In order to verify that the model held across job types, the same path model was reanalyzed, adding job types as a fifth predictor variable. This new model explained the same proportions of variance in intrinsic motivation (68%), and in the four dimensions of empowerment (meaningfulness, 22%; impact, 19%; autonomy, 55%; and competence, 4%), as the initial model, difference $F(1, 157), p > .05$. Therefore, adding job type as a predictor variable did not explain significantly more variation in the outcome variables, implying that the initial model held across these types of jobs.

The path analysis supported our prediction that the job characteristics are likely to have varying relations with the multiple aspects of empowerment. Feelings of meaningfulness were significantly positively associated with task

significance (β = .29, p < .01), and with receiving feedback from others (β = .17, p < .05). Feelings of impact were significantly positively associated with receiving feedback from others (β = .20, p < .05), working in an autonomy-supportive context (β = .28, p < .01), and having a job that provides inherent feedback (β = .20, p < .05). Feelings of autonomy were significantly positively associated with working in an autonomy-supportive context (β = .63, p < .001) and having a job that provides inherent feedback (β = .13, p < .05). Feelings of competence were significantly *negatively* associated with having a job that involves working in an autonomy-supportive context (β = -.26, p < .05).

The path analysis also supported our prediction that the multiple aspects of empowerment are likely to have varying relations with intrinsic task motivation. Intrinsic motivation was significantly positively associated with feelings of meaningfulness at work (β = .52, p < .001), and with feelings of autonomy (β = .16, p < .05). It was unrelated to feelings of impact, and negatively to feelings of competence (β = -.11, p < .05). Finally, the job characteristics of feedback from agents and task meaningfulness also directly enhanced intrinsic motivation (β = .16, p < .01, and β = .28, p < .001, respectively).

Discussion

The present study demonstrated that dividing empowerment into multiple components allows for more detailed and useful analyses of its antecedents and consequences. Thus, the four dimensions of empowerment—autonomy, competence, meaningfulness, and impact—were shown to have different sets of job characteristics as their predictors, and to predict intrinsic motivation in markedly different ways. These results thus support the notion that it is useful to treat empowerment as a multidimensional construct.

Thomas and Velthouse's (1990) and Spreitzer's (1992) conceptualization of empowerment as consisting of four components was confirmed with a principal components factor analysis. We found evidence for four related but distinct dimensions making up empowerment. These results extend Spreitzer's findings to nonmanagerial workers performing different types of jobs, and provide evidence for the generalizability of Thomas and Velthouse's conceptualization of empowerment.

The path analysis revealed that job characteristics are importantly involved in workers' feelings of empowerment, as demonstrated through the amount of explained variance in each dimension of empowerment. The importance of conceptualizing empowerment as a multiplicity was supported by the fact that none of the job characteristics displayed uniform relations across all four aspects of empowerment. Furthermore, there was evidence that particular job characteristics can be associated with different aspects of empowerment in *opposite* ways. For

example, working in an autonomy-supportive context appeared to facilitate feelings of autonomy and impact, but such contexts also threatened feelings of competence.

The negative relation obtained between autonomy-supportive work contexts and feelings of competence was indeed quite surprising. Self-determination theory suggests that feelings of competence and self-determination should generally be interrelated (Deci & Ryan, 1987). Also, Spreitzer's (1992) study of managers found that competence was the one aspect of empowerment that was positively associated with an organizational culture that values individual initiative. We would speculate that the different pattern of results obtained here may have to do with the fact that we studied technicians and sales representatives rather than managers, the latter of which may be more accustomed to functioning with a high degree of autonomy in decision making.

Deci's (1995) discussion of the possible confusion between supporting autonomy and being permissive may be relevant here as well. He argued that supporting autonomy must be done in a context that includes adequate goals, structures, and limit setting, which will promote the internalization of desired behaviors. In the present case, it could be possible that the organization failed to provide adequate structures that would have enhanced the workers' feelings of competence through autonomous work. However, these results should be viewed cautiously in light of the small amount of variance explained by autonomy support in feelings of competence.

Many of the relations obtained between job characteristics and particular aspects of empowerment were not at all surprising. As hypothesized by Hackman and Oldham (1975), task significance appeared to promote feelings of meaningfulness at work. It also directly enhanced intrinsic motivation at work. Jobs rich in feedback were associated with higher feelings of autonomy and impact, but were not associated with higher feelings of competence. This lack of a relationship may be due to the kind of feedback workers obtain from their job; it may not be informative of their abilities. Getting informative feedback from one's job has been shown to enhance feelings of autonomy (Hackman & Oldham, 1975). This may also help workers to see the impact they have through their work.

Obtaining feedback from other people at work enhanced feelings of meaningfulness and impact, but not competence. As with feedback from the job, these last results would make sense if the informativeness condition was met. Feedback from others also directly influenced intrinsic motivation in a positive manner. Also consistent with our predictions, autonomy-supportive contexts were strongly positively associated with personal feelings of autonomy, and also positively associated with having an impact through one's work.

The links from the empowerment dimensions to intrinsic motivation provided evidence for the differential influence of empowerment on intrinsic motivation experienced at work. Thomas and Velthouse (1990) argued that

meaningfulness and impact would be just as important as feelings of autonomy and competence when considering intrinsic motivation at work. The present results revealed that the more meaningful the work was perceived to be, the more intrinsically motivated the employees felt. However, impact was not a predictor of intrinsic motivation; for example, believing that one's behavior leads to intended effects did not increase the workers' motivation at work.

Employees' feelings of autonomy affected their intrinsic motivation at work, although the weight was not very strong. It could be possible that autonomy is not desired as strongly by nonmanagerial workers, and that being provided with autonomy does not have as strong an effect on intrinsic motivation when it is not desired. The difference, discussed earlier, between autonomy support and permissiveness may be relevant here as well. If the choices workers can make are not accompanied by adequate guidelines, they may not have the expected effects on intrinsic motivation.

Lastly, the more competent the employees felt, the less intrinsically motivated they were. This finding is quite surprising in light of the previously mentioned research, but there are at least two other studies that also failed to find a significant positive link. Thomas and Tymon (1994) obtained nonsignificant links between competence and job satisfaction, stress, and job effectiveness. One explanation could be that workers feel competent, but are not acknowledged as such by the organization. This lack of recognition could mediate the negative link between competence and various psychological constructs, such as motivation and job satisfaction. However, the negative link obtained in the present study was not very strong, even if statistically significant; therefore, this result may be interpreted cautiously. Another study by Senécal (1994) found no significant relation between feelings of competence in the family domain and intrinsic motivation for family responsibilities. It was explained by the fact that, for parents, feelings of autonomy and the quality of interpersonal relationships were more important determinants of motivation than feelings of competence.

Is enhancing intrinsic task motivation something that organizations should value? Yes, if one considers Thomas and Velthouse's (1990) list of behaviors and experiences that have been associated with intrinsic motivation: flexibility, creativity, initiative, resiliency, self-regulation, activity, and concentration. Intrinsic motivation has also been positively associated with satisfaction and mental health (Blais et al., 1993), better performance (Kanfer & Ackerman, 1989), greater conceptual learning (Deci & Ryan, 1987), higher self-esteem (Deci, 1995), and lower rates of burnout (Blais et al., 1993). Thomas and Velthouse used the term empowerment to permit the identification of the processes that affect intrinsic task motivation; these processes, once assessed, could then be used to guide interventions intended to improve intrinsic task motivation (see Thomas & Tymon, 1994, for more details).

What can then be done in order to enhance empowerment, and at the same time intrinsic motivation? Thomas and Velthouse (1990) suggested either changing the environment or changing interpretations of the environment. Job design, such as the job characteristics studied here, would be an instance of the first type of change. In this vein, Hackman and Oldham (1975) proposed concrete interventions intended to increase levels of the desirable job characteristics. For example, combining tasks can increase the skill variety of a job, and opening communication channels can increase feedback.

Many questions have yet to be answered concerning Thomas and Velthouse's (1990) and Spreitzer's (1992) multidimensional conceptualization of empowerment. First, future research should include objective outcomes reflective of motivation, such as performance and absenteeism measures. Second, it would be advisable to replicate this study using other types of jobs, and in different types of organizations. Third, future research should include individual differences measures in order to observe person–environment fit effects on empowerment.

In conclusion, the present study demonstrates the importance of treating empowerment as a multidimensional construct by showing that the dimensions of empowerment can be differentially affected by various environmental variables, in this case proximal job characteristics. In turn, the dimensions of empowerment differentially affect workers' intrinsic task motivation. Future research, adopting a multidimensional approach to empowerment, may allow a clearer understanding of the multiple processes involved in motivating workers.

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