



Prediction of working motivation through job characteristic: the role of internal motivation, general and growth satisfaction

Nazila Karimi ^{*a}, Seyed Ali Siyadat ^b

^a PhD student of management, Isfahan University, Isfahan, Iran

^b Associate professor of management, Isfahan University, Isfahan, Iran

Article history:

Received 25 April 2014

Received in revised form 14 May 2014

Accepted 20 May 2014

Keywords:

work motivation

job characteristic

skill variety

task identity

task significance

autonomy and feedback

internal motivation

general satisfaction

growth satisfaction

Abstract

Introduction: The current research investigates the predictors of work motivation through job characteristic in staff members of educational vice chancellor of Iran's ministry of education.

Materials and Method: Data were collected from the 200 staff members by using simple random sampling method. Job diagnostic survey questionnaire (Hackman & Oldham, 1975) was employed for assessment of job characteristics and Work Motivation and Job Satisfaction Scale (WMJSS) were used for assessing participants Motivation toward work tasks.

Results: Findings revealed that there is a positive and significant relationship between job characteristics and working motivation. The multiple regression results also revealed that Working Motivation is significantly predicted by job characteristic. Also all job characteristics sub variables includes skill variety, task identity, task significance, autonomy and feedback were meaningful predictors of work motivation, internal motivation, general satisfaction and growth satisfaction. The highest variance is explained by skill variety and the lowest by autonomy.

Conclusion: Teachers and staffs who were satisfied with their job had high motivation for working properly and vice versa.

1. Introduction

The importance of employee satisfaction and work motivation is growing all the time in the companies. Many researches have been made to find out the effect the job satisfaction and motivation have in the productivity of the company (Gagné and Deci, 2005; Jesus and Lens, 2005). Psychologists also have spent considerable effort trying to construct theories of motivation, particularly in the academic context (Marsh et al., 2006). Researchers and practitioners alike have devoted a considerable amount of energy to understanding workers' motivation (Buys et al., 2007; Fernet et al., 2004). However, considering the multiple tasks that workers have to perform, it may be difficult to identify with precision the motivational processes underlying each given task and their relative impact on workers' psychological functioning. Indeed, motivational processes are not necessarily uniform and may vary across the different work tasks carried out by teachers. Furthermore, despite the different theoretical approaches used to understand teachers' motivation (e.g., self-efficacy, locus of control), few have yet focused on the "job characteristics" in the motivational processes (Alev et al., 2009, Fernet et al., 2005).

However, two social cognitive theories of motivation: social learning theory of internal-external locus of control (Rotter, 1966) and self-efficacy theory (Bandura, 1977; 1997) tries to study workers' motivation. Research based on both theories underscores the relevance of competence beliefs. Although these beliefs are important for predicting intentional behaviors, we believe that an exclusive focus on workers' competence does not allow us to verify to what extent motivated behavior is integrated within the self (Fernet et al., 2008).

Besides social cognitive theories, self-determination theory (SDT) reveals that, workers may perceive themselves as competent, but some may perform their work tasks because they personally grasp the value of their work, whereas others engage in these work tasks because of external pressures or benefits associated with the work. Both examples involve instrumentalities that

may lead to different outcomes. The former example entails personal endorsement and a feeling of choice, which may lead to well-being, whereas the latter involves compliance with an external source of control, which may generate ill-being. Thus, unlike most other theories of motivation, SDT emphasizes the experience of choice in the regulation of behaviors (Gagné and Deci, 2005).

In this regard, job characteristics model (JCM) has been designed which consists of five core job characteristics that affect three critical psychological states (CPS) of an employee that in turn affect the personal, affective (e.g. satisfaction and motivation) and behavioral (e.g. performance quality, absenteeism) responses of employees to their work. Moreover this relationship is moderated by the variable of growth need strength (employee's desire for growth). Originally Hackman and Oldham presented a three stage model and also empirically tested it but later on majority of the researchers excluded the mediating variable- psychological states and moderating variable - growth need strength and tested the two stage model, determining direct relation of job characteristics with outcomes. Behson et al. (2000) conducted a Meta-analysis of thirteen studies to check the fit of three stages and two stages model. They found that normally tested two stage model in the literature may provide better fit to the data than the three stage original model.

Job design refers to "the way tasks are combined to form complete jobs" (Robbins and Coulter, 2006). The importance of job design has been realized by managers, scholars, theorists, many, many year's back. Process of job design has evolved over a long period of time. In this research general satisfaction as the first sub criteria for job characteristics has taken the two aspects: general satisfaction and growth satisfaction as dependent variables. The reason to select these two aspects is because these are the most widely used aspects of job satisfaction in job characteristics model research. General satisfaction is an overall measure of the degree to which the employee is satisfied and happy with the job (Hackman and Oldham, 1975).

Growth satisfaction is described as the opportunities for personal growth and

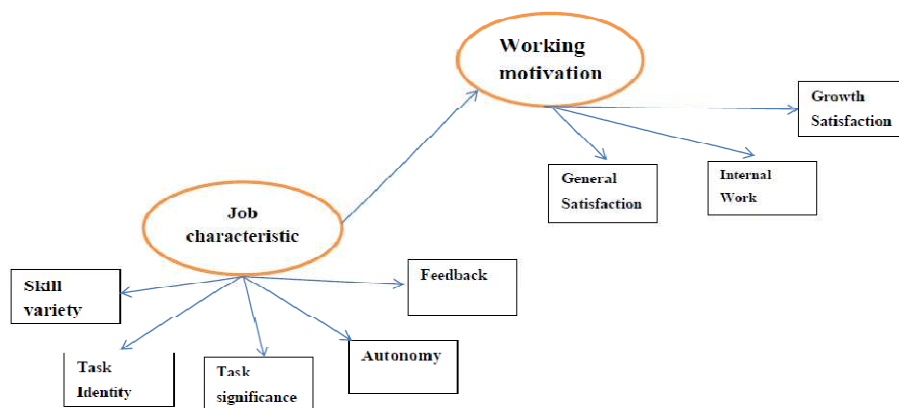
development. This refers to the extent to which an employee likes to have challenge in his job. In addition internal work motivation it is the degree to which the employee is self-motivated to perform effectively on the job. i.e., the employee experience positive internal feelings when working effectively on the job, and negative internal feelings when doing poorly (Mellette and Gagne, 2008).

This research has used five independent variables collectively known as the job characteristics. These are described in detail as under: Skill variety which refers to the degree to which a job requires a variety of different activities in carrying out the work, which involve the use of a number of different skills and talents of the person. The second one is .Task identity which refers to the degree to which the job requires completion of a whole and identifiable piece of work that is doing a job from beginning to end with a visible outcome (Lin et al., 2007). The third one is Task significance which refers to the degree to which the job has a substantial impact on lives or work of other people, whether in the immediate organization or in the external environment. Also Task Autonomy is the degree to which the job provides substantial

freedom, independence and discretion to the individual in scheduling the work and in determining the procedures to be used in carrying it out (Akinboye, 2001; Alev et al., 2009). Finally feedback refers to the degree to which carrying out the work activities required by the job results in individual obtaining clear information about the effectiveness of his or her performance (Buys et al., 2007).

Previous research on the relationship between job characteristics and work motivation shows that there is a significant and positive relationship between job characteristics and work motivation (Hunter, 2006; Hackman and Oldham, 1976; Loher et al., 1985; Behson et al., 2000; Scott et al., 2005; Lin et al., 2007; Brass, 1981, Becherer et al., 1982; Champoux, 1991; Ross, 2005. etc). So the main hypothesis for this study is that there is positive and significant relationship between job characteristics and work motivation in staff members of educational vice chancellor of ministry of education. The theoretical model for this research is shown in figure 1.

Figure1. Relationship between job characteristics and work motivation



2. Method

2.1 sample

Statistic population of research includes all staff members (at the same time teacher) of educational vice chancellor of Iran’s ministry of education. Data were collected from the 200 staff members (100 men, 100 women, and 4 without gender

Identification) by using simple random sampling method. Participants were asked to fill out the questionnaire. Participants’ mean age was 40.2 years ($SD = 5.86$) and mean years of experience was 18.8 years ($SD = 10.69$); 81% of the participants married, and 53% had at least one

dependent child. There were 95 elementary teachers and 105 high school teachers.

2.2 Measurement

2.2.1 Job diagnostic survey questionnaire (Hackman and Oldham, 1975):

Job diagnostic survey questionnaire has been considered most reliable measurement scale for measuring the job characteristics model variables. All the items given in questionnaire are developed on seven point Likert scale ranging from score 01 for strongly disagreed to score 07 for strongly agreed. This questionnaire also had 12 reverse scoring items which helped the researcher to determine whether respondents have filled the questionnaire properly after reading it carefully or not.

2.2.2. Work Motivation and Job Satisfaction Scale (WMJSS)

The first section of the questionnaire collected information such as age, sex, experience, professional status, marital status, position, and so on. The second section contained the items, and was divided into two parts. The first part of Work motivation which contains 15-item using a Likert scale ranging from strongly agrees to strongly

disagree. Items were adapted from Work Motivation Behavior Scale of the Akinboye's 2001 executive behavior battery. The second part of the instrument contains items that measure job satisfaction which include 5-point Likert scale ranging from very dissatisfied to very satisfy. Items in this section were adapted from the Minnesota Satisfaction Questionnaire by Weiss et al (1967).

3. Results

Table on shows the deceptive results includes mean, standard deviation and alpha of all sub variables of job characteristics and work motivation. Mean scores and standard deviation range in turn from 4/06 (internal work motivation) to (5/43) Growth satisfaction and (0/22) Task Identity to (0/89) Growth satisfaction. Correlational results also show that there is a meaningful correlation between job characteristics and work motivation. The lowest and highest interrelationship among variables and sub variables of job characteristics and work motivation in turn is between general satisfaction and Skill Variety (0 /20) and growth satisfaction and feedback (0/89). Relating results are shown in table 1.

Table1. Correlation between job characteristics and work motivation

	M	SD	Alpha	1	2	3	4	5	6	7	8
Job Characteristics											
1- Skill Variety	4.32	0.33	0.87	1							
2- Task Identity	5.01	0.22	0.76	0.22	1						
3- Task Significance	4.22	0.83	0.77	0.23	0.37	1					
4- Autonomy	4.37	0.88	0.68	0.44	0.60	0.38	1				
5- Feedback	5.81	0.71	0.60	0.55	0.28	0.41	0.60	1			
Work motivation											
6- Internal Work Motivation	4.06	0.77	0.80	0.27	0.80	0.43	0.54	0.37	1		
7- General satisfaction	5.01	0.71	0.88	0.20	0.62	0.51	0.38	0.21	0.68	1	
8- Growth satisfaction	5.43	0.89	0.81	0.59	0.71	0.69	0.47	0.89	0.81	0.77	1

All Correlations are significant at 0.01 levels. **Note:** M stands for mean and SD stands for standard deviation

Additionally t value, regression and Adjusted regression square shows that work motivation is significantly predicted through job characteristics. R results showed the meaningful correlations between job characteristics and work motivation. The Regression and R - Square results also showed that job characteristics explain 0/33 variance in work motivation .also skill variety, task identity,

task significance, autonomy and feedback explain (0/19),(0/13),(0/21),(0/10) and (0/15) of work motivations variance in turn. It means that all job characteristics sub variables are meaningful predictors of work motivations. The highest variance is explained by skill variety (0/19) and the lowest by autonomy (0/10). These results are shown in table 2.

Table2. Prediction of Job Characteristics through work motivation

Variables	T	R	R S	A R S
Job Characteristics	2.20	0.49	0.25	0.25
Skill Variety	3.33	0.32	0.19	0.18
Task Identity	4.30	0.26	0.13	0.12
Task Significance	7.11	0.42	0.21	0.20
Autonomy	3.04	0.20	0.10	0.11
Feedback	5.50	0.30	0.15	0.16

Note: t stands for Value. R stands for regression. R S stands for regression square, A R S, stands for adjusted regression square

4. Discussion

In the stage correlation results showed that there is a positive relationship between job characteristics and working motivation (e.g. general satisfaction, internal work motivation, growth satisfaction). In this research correlation results are in line with too many other researchers' results as well. Especially correlations results are very good as compare to the correlations found in the some other studies on job characteristics model in the staff members of ministry of education. (i.e. [Birnbaum et al., 1986](#); [Awamleh and Fernandez, 2007](#)). These results are also very significant. Moreover the regression results showed that there is a significant effect of the job characteristics on work motivation. However the effect of job characteristics on growth satisfaction was less significant. Although the regression results are slightly lower than the other findings in the past but these can be treated as good as compare to the regression results found by other researchers on job characteristics model in staff members of ministry of education. Thus the correlations and regressions proved our three hypotheses regarding the positive and significant relationship between the job characteristics and work motivation.

Thus job characteristics model can be very helpful in designing the jobs of all teachers employed in education ministry. The Human resource managers of the education ministry design the jobs of teachers and staff members of office, organizations and ministry with paying proper consideration to the job characteristics. More over if they feel that the job satisfaction and motivational level of the employees is reducing due to fatigue, boredom from the work, they should redesign their jobs with the inclusion of these job characteristics to rebuild the job satisfaction and motivational level of the employees.

Additionally, as job characteristics leads towards the intrinsic satisfaction of the employees on work so more research should be conducted to identity the extrinsic factors which leads towards the job satisfaction of the employees of Iran's staff members of ministry of education and then both extrinsic and intrinsic factors may be combined together to determine the overall satisfaction of the employees.

It is important to note some limitations of this study. First, the study is correlational and as such we cannot assume any causal relationship between job characteristics and work motivation. Second, the samples used for this study are staff members

(at the same time teacher) of educational vice chancellor of Iran's ministry of education. So findings cannot be generalized to other branches of educational ministry. Third, the job characteristics model is considered as the most influential theories of job design. The issue of job design is multi-dimensional. Therefore it is very difficult to analyze its all aspects in one study. Due to time and financial constraints the researcher could not collect data from all branches of education ministry. Future researchers may focus on the limitations and work improving the generality of the results.

References

- Akinboye, J. O. (2001). *Executive behavior battery*. Ibadan: Stirling- Horden Publishers.
- Alev, K., Gulem, A., Gonca, G. & Burca, G. (2009). Exploring the antecedents of organization identification: the role of job dimension, individual characteristics and job involvement. *Journal of nursing management*, 17(1), 66-73.
- Awamleh, R., & Fernandes, C. (2007). The impact of core job dimensions on satisfaction and performance: A test in an international environment. *International business and economics research journal*, 6(1), 69-76.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: Freeman.
- Becherer, R. C., Morgan, F. W., & Richard, L. M. (1982). The Job Characteristics of Industrial Salespersons: Relationship to Motivation and Satisfaction. *The Journal of Marketing*, 46(4), 125-135.
- Behson, S. J., Eddy, E. R., & Lorenzet, S. J. (2000). The importance of critical psychological states in the job characteristics model: A Meta analytic and structural equations modeling examination. *Journal of social psychology*, 5(12), 1-14.
- Birnbaum, P. H., Farh, J. L., & Wong, G. Y. Y. (1986). The job characteristics model in Hong Kong. *Journal of applied psychology*, 71(4), 598-605.
- Brass, D. J. (1981). Relationships, Job Characteristics, and Worker Satisfaction and Performance. *Administrative Science Quarterly*, 26 (3), 331-348.
- Buys, M. A., Olckers, C., & Schaap P. (2007). The construct validity of the revised job diagnosis survey. *South African journal of business management*, 32(1), 11-29.
- Champoux, J. E. (1980). A three sample test of some extensions to the job characteristics model of work motivation. *The academy of management journal*, 23(3), 466-478.
- Fernet, C., Guay, F., & Senécal, C. (2004). Adjusting to job demands: The role of work self-determination and job control in predicting burnout. *Journal of Vocational Behavior*, 65(1), 39-56.
- Fernet, C., Senécal, C., & Guay, F. (2005). *Classroom and School Context Teacher Self-Efficacy Scale* [The French Canadian validation of the "Classroom and School Context Teacher Self-Efficacy Scale"]. Paper presented at the 27th Congrès de la Société Québécoise pour la Recherche en Psychologie (SQRP), Québec, Canada.
- Fernet, C., Senécal, C., Guay, F., Marsh, H., & Dowson, M. (2008). The Work Tasks Motivation Scale for Teachers (WTMST). *Journal of Career Assessment*, 16(2), 256-279.
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331-362.
- Hackman, J. R., & Oldham, G. R. (1975). Motivation through the design of work: test of a theory. *Organization behavior and human performance*, 16, 250-79.
- Hunter, P. E. (2006). *Viability of job characteristics model in a team environment: Prediction of job satisfaction and potential moderators*. Unpublished thesis, Denton Texas: University of North Texas.
- Jesus, S. N., & Lens, W. (2005). An Integrated Model for the Study of Teacher Motivation. *Applied Psychology*, 54(1), 119-134.
- Lin, B. Y. J., Yeh, Y. C. & Lin, W. H. (2007). The influence of job characteristics on job outcomes of the pharmacists in hospital, clinic, and community pharmacies. *Journal of medical systems*, 31(3), 224-229.
- Loher, B. T., Noe, R. A., Moeller, N. L. & Fitzgerald, M. P. (1985). A Meta-Analysis of the relation of Job Characteristics to Job Satisfaction. *Journal of Applied Psychology*, 70(2), 280-289.
- Marsh, H. W., Martin, A. J., & Hau, K-T. (2006). *A Multiple Method Perspective on Self-concept Research in*

- Educational Psychology: A Construct Validity Approach*. In M. Eid & E. Diener (Eds.), *Handbook of Multi method Measurement in Psychology* (pp. 441-456). American Psychological Association: Washington DC.
- Milletete, V., & Gagne, M. (2008). Designing volunteer's tasks to maximize motivation, satisfaction and performance: The impact of job characteristics on volunteer engagement. *Springer Science and Business media*, 32, 11-22.
- Robbins, S. P., & Coulter, M. (2006). *Management*. India: Prentice Hall of India.
- Ross, D. L. (2005). Perceived job characteristics and internal work motivation. *Journal of management development*, 24(3), 253-266.
- Rotter, J. (1966). Generalized expectancies for internal versus external control of reinforcements. *Psychological Monographs*, 80(1), 1-28.
- Scott, M., Swortzel, K. A. & Taylor, W. N. (2005). Extension agent's perceptions of fundamental job characteristics and their level of job satisfaction. *Journal of Southern Agricultural Education Research*, 55(1), 45-54.
- Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire. Vol. 22*. Minnesota Studies in Vocational Rehabilitation, Minneapolis: University of Minnesota, Industrial Relations Center.