

## INTERNATIONAL JOURNAL OF ORGANIZATIONAL LEADERSHIP

WWW.CIKD.CA

journal homepage: <https://www.ijol.cikd.ca>



# Polychronicity as Moderator in the Relationship between Skill Variety and Job Satisfaction

**Aneel Kumar<sup>1\*</sup>, Bushra Memon<sup>2</sup>, Zahid Hussain Sohu<sup>3</sup>, Muhammad Waqas  
Maharvi<sup>4</sup>**

<sup>1,2,3</sup>Institute of Commerce and Management, Shah Abdul Latif University, Pakistan

<sup>4</sup>Institute of Business, Management and Administrative Sciences, The Islamia University of Bahawalpur,  
Pakistan

### ABSTRACT

#### Keywords:

*Skill variety, Polychronicity, Job  
satisfaction*

#### Received

26 July 2023

#### Received in revised form

08 August 2023

#### Accepted

10 August 2023

#### \*Correspondence:

[aneel.kumar@salu.edu.pk](mailto:aneel.kumar@salu.edu.pk)

Building on the premises of person-job fit theory (Edwards, 1991), taking skill variety as the job characteristic (Hackman & Oldham, 1975, 1976) and polychronicity as an individual's value, we seek to determine the interactive effect of skill variety and polychronicity on the job satisfaction level of garments' franchise employees. Primary data were collected from the 175 employees of 24 franchise outlets of various well known garments' companies located in Sukkur district of the Sindh province of Pakistan by applying random sampling. The results showed a positive and significant effect of skill variety on job satisfaction, as hypothesized. Further, moderation analysis showed the significant interactive effect of skill variety and polychronicity on job satisfaction, as hypothesized. The interaction graph showed that the relationship between the independent variable (i.e., skill variety) and dependent variable (i.e., job satisfaction) was stronger when the level of moderating variable (i.e., polychronicity) was high as compared to when it was low. Focusing on the behavioural aspects of the jobs, HRM managers designing the jobs of employees should consider both the job and individual characteristics. A fit between the job such as jobs offering skill variety, and the employees' values such as polychronicity can yield the best possible outcome i.e., job satisfaction.

©CIKD Publishing

Job satisfaction rigorously studies employees' attitudes. Job satisfaction refers to the extent to which an employee is satisfied and happy with the job (Hackman & Oldham, 1975). It shows an individual's general attitude towards a job (Robbins & Coulter, 2007). It's the outcome about which managers are most concerned because satisfied employees are the employees who are

likely to stay in the organization (Robbins & Coulter, 2007). Person-job fit theory (Edwards, 1991) postulates that one of the primary factors that influence individuals' job satisfaction is the person-job fit. Individuals and organizations are the joint determinant of the organizational outcomes i.e., job satisfaction (Edwards, 1991). This theory offers two broad classes. One class is related to the employees' desires and the supplies offered by the job to meet these desires, and the other class is related to the jobs' demands and employees' abilities required to fulfill these demands. Focusing on the first class of person-job fit theory, this study has incorporated the skill variety from job supplies and polychronicity as the individual's value from the desires. Skill variety is taken from a prominent job design theory, i.e., job characteristics model (JCM) (Grant et al., 2010). This model of job redesign offers five core job characteristics for the motivation and satisfaction of employees (Hackman & Oldham, 1975, 1976). According to Hackman and Oldham (1976), the skill variety job characteristic 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 employee" (p. 257). On the other hand, according to Bluedorn et al. (1999), polychronicity refers to "the extent to which people in a culture: (1) prefer to be engaged in two or more tasks or events simultaneously; and (2) believe their preference is the best way to do things" (p. 207). Employees with polychromic values anticipate doing multiple tasks simultaneously as part of normal routine work rather than interruptions; conversely, employees with monochromic values focus on a single task, and doing multiple tasks are perceived as interruptions (Bluedorn et al., 1999). Therefore, based on the person-job fit theory (Edwards, 1991), we argue that a job offering a variety of different activities is likely to be well executed by employees with polychromic values. Building on the premises of person-job fit theory (Edwards, 1991), taking skill variety as the job characteristic (Hackman & Oldham, 1975, 1976) and polychronicity as an individual's value, this study offers a novel take by testing the interactive effect of skill variety and polychronicity on job satisfaction level of employees. This will help the HRM managers and organizations, designing the jobs of employees to understand the varying effect of skill variety on job satisfaction, depending upon the polychronic values possessed by an employee. A fit between the jobs offering skill variety and the employees' values such as polychronicity are likely to have positive influence on the job satisfaction level of employees.

## **Literature Review / Theoretical Framework and Hypothesis**

### ***Relationship between Skill Variety and Job Satisfaction***

Historically, job design focused on making tasks smaller and more specialized such as Adam Smith's work, known as the division of labor, and Fredrick Taylor's scientific management theory of work specialization (Robbins & Coulter, 2007). Although, up till the first half of the twentieth century focus was on work specialization as a source of increasing efficiency and productivity in the workplace, management researchers started to realize the value of behavioural aspects of the job. Behavioural researchers were of the view that doing repetitive tasks may lead to boredom and dissatisfaction among workers. Hawthorne's studies are considered one of the pioneering work on the behavioural aspects of the job (Robbins & Coulter, 2007). Further, in the context of the job design, JCM (Hackman & Oldham, 1974, 1975, 1976) of job satisfaction and motivation is considered the pivotal work, focusing on the behavioural aspects of the job. Among the five core job characteristics provided in JCM, skill

variety refers to doing different things at work in contrast to routine and repetitive tasks (Hackman & Oldham, 1974). Since the inception of the JCM (Hackman & Oldham, 1975) of job satisfaction and motivation, plenty of research has been done to provide support for skill variety as the potential predictor of job satisfaction. Studies have found a positive relationship between skill variety and job satisfaction, as initially predicted by JCM (Hackman & Oldham, 1975, 1976; Keena et al., 2020; Kumar et al., 2011; Meijer, 2022; Rai & Maheshwari, 2020; Serhan & Tsangari, 2022). Therefore, based on the premises of JCM and empirical investigations, it is proposed that;

**H1:** Skill variety is positively associated with job satisfaction.

### ***Polychronicity as the Moderator in the Relationship between Skill Variety and Job Satisfaction***

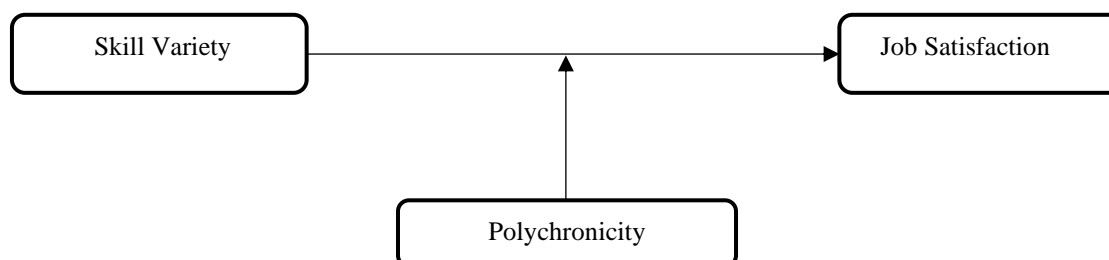
Person-job fit theory (Edwards, 1991) proposes that either the person can moderate the relationship between job and outcomes or the job can moderate the relationship between person and outcomes. These methods have been evident in the models of job satisfaction, where strength or importance of desire is used as a moderator in the relationship between job characteristics and job satisfaction. Based on these premises of person-job fit theory (Edwards, 1991), this study has taken skill variety as a characteristic from the JCM (Hackman & Oldham, 1975) and polychronicity as the desire or value to postulate that the effect of skill variety on job satisfaction is likely to be more for the employees with polychronic values because, these employees like to do multiple tasks simultaneously rather than sticking to just one single task (Bluedorn, et al., 1999). Further, there is ample evidence to support the potential impact of polychronicity on job satisfaction (Andriani & Disman, 2020; Arndt et al., 2006; Jang & George, 2012). Polychronicity is also used as a moderator in the relationship between several antecedents and outcomes including job satisfaction such as between the degree of ICT support for contextualization and job satisfaction (Zhu & Smith, 2019); between nepotism, work-family conflict, and extra-role customer service behaviours (Daskin, 2015); between task variety and organization-based self-esteem (Hui et al., 2010); daily interruptions and daily satisfaction (Pachler et al., 2018), however, it's hard to find the moderating role of polychronicity in the relationship between skill variety and job satisfaction. Therefore, this study fills in the gap by offering polychronicity as the condition under which the effect of skill variety on job satisfaction will be stronger for the employees with polychronic value and weaker for the employees low on polychronic values. Thus we propose that;

**H2:** The relationship between skill variety and job satisfaction is likely to be stronger for employees with polychronic values.

Figure 1 present the study's model and hypothese.

### Figure 1

Research Model



## Method

### Sample

Primary data were collected from the employees of 24 franchise outlets of various well known garments' companies located in Sukkur district of the Sindh province of Pakistan. The motivation to collect data from garments' franchise employees was the use of multiple tasks simultaneously by them such as employees garments' franchise should be computer literate, iron the clothes, use good communication skills while dealing with customers, maintain the stock register, and many more. Therefore, to manage such a variety of tasks offered by their jobs, they have to be good enough to manage these multiple tasks simultaneously. If employees have polychronic value, switching from one task to another is likely to be perceived as part of routine job work rather than interruptions. Random sampling was applied. The total population was unknown as there is no database available that can provide such information. Therefore, we reached almost all the outlets under study and found a total population of around 200. According to Saunders et al. (2015), for a population of around 200, a sample of 132 is considered sufficient at a 5 % significance level (p. 219). However, to have maximum representation from the population, we distributed a questionnaire among all employees working there. We distributed around 200 questionnaires, and finally, 175 respondents who properly filled out the questionnaire were included as a sample for this study which is much more than the calculated sample size of 132. Further, regarding the demographic characteristics of the sample related to the gender of the respondents, 80 % were male, whereas 20 % were female. Regarding the age of the respondents, 58 % of the respondents fell within the age of 20 to 29 years, 26 % of the respondents fell within the age of 30 to 39 years, 11 % of the respondents fell within the age of 40 to 49 years, and 05 % of the respondents were the age of above 50 years. Regarding the experience level of the respondents, 42 % of the respondents had an experience of 1 to 2, 26 % of the respondents had experience above 2 to 5 years, 17 % of the respondents had experience above 5 to 10 years, and 15 % of the respondents had the experience of above 10 years.

### Instruments

All the items were measured through a five-point Likert survey questionnaire. Skill variety and job satisfaction were measured through the three items for each construct, adopted from the job diagnostic survey questionnaire of JCM (Hackman & Oldham, 1975), and polychronicity was

measured through ten items adopted from the inventory of polychronic values (Bluedorn et al., 1999).

### Analysis Techniques

Data were analysed through a statistical package for social sciences (SPSS). Multiple regression analysis were run to investigate the propositions. Moderation analysis were conducted through the Modprobe Macro (Hayes & Matthes, 2009), installed in SPSS. According to Aiken et al. (1991), if a significant interaction term is found, then to understand its interpretation, we need to plot the interaction graphs. The interaction term can change the direction of the relationship between the independent variable and dependent variable from positive to negative and vice versa or it can make the relationship weaker or stronger, as reported in a study by Kumar et al. (2019). Therefore, we further plotted the interaction graphs to comprehend the meaning of interaction term, whether it is consistent with the direction we proposed in our study or not.

### Results

First, initial screening tests were performed (i.e., missing values, outliers). Further, the reliability of each variable was determined. A threshold value of .7 or above shows the reliability of a measure (Hair et al., 2010; Nunnally, 1978). Furthermore, descriptive statistics (i.e., mean, standard deviation, and correlations) were determined. Correlations showed a positive relationship between the predictor (i.e., skill variety) and dependent measure (i.e., job satisfaction) as hypothesized. These results are given in Table 1.

**Table 1**

*Descriptive Statistics, Correlations, and Reliability*

S. No.	Variable	<i>M</i>	<i>SD</i>	$\alpha$	1	2	3	4	5	6
1.	Gender	N.A	----	----	1	-----	-----	-----	-----	-----
2.	Age	1.63	.873	----	-.18	1	-----	-----	-----	-----
3.	Experience	2.04	1.09	----	-.13	.80**	1	-----	-----	-----
4.	Skill Variety	2.71	.80	.70	.00	.03	.01	1	-----	-----
5.	Polychronicity	2.66	.46	.70	.00	-.13	-.08	.12	1	-----
6.	Job Satisfaction	2.74	.77	.72	-.08	.15	.05	.57**	.06	1

Note. N= 175; \* $p < 0.05$ , \*\* $p < 0.01$ ; NA = Not Applicable

Further, to find out the results of proposed relationships, moderation analysis was conducted through SPSS with Modprobe moderation analysis macro (Hayes & Matthes, 2009). The results showed a positive and significant effect of our independent variable (i.e., skill variety) on the dependent variable (i.e., job satisfaction) ( $\beta = .52, p < .01$ ), as hypothesized. Therefore, H1 was supported. Furthermore, moderation analysis showed a significant interaction effect between skill variety and polychronicity ( $\beta = .33, p < .05$ ). Overall, the model explained a significant amount of variance ( $R^2 = .34; F = 29.95; p < .01$ ). Further, change in r-square, due to moderation was also significant (Adjusted  $R^2 = .02; F = 4.39; p < .05$ ). These results are given in Table 2.

**Table 2**

*Moderating Effect of Polychronicity in the Relationship between Skill Variety and Job Satisfaction*

Independent Variables	$\beta$	Std. Error	<i>t</i>	<i>p</i>
Skill Variety	.52	.06	56.4.6	.00**
Polychronicity	.08	.11	.73	.46
Polychronicity X Skill Variety	.33	.15	2.09	.03*

Dependent Variable: Job Satisfaction

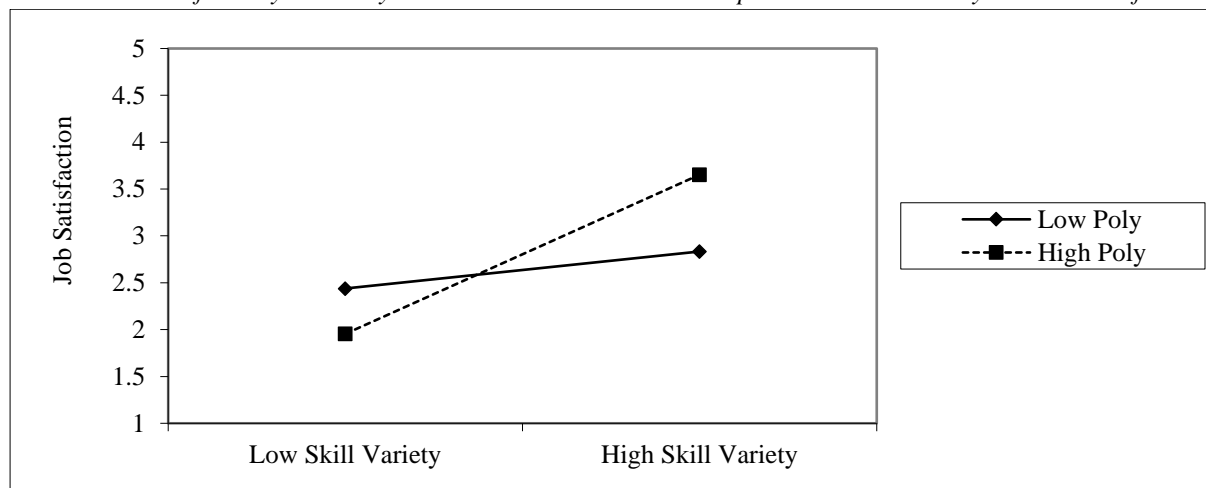
$R^2 = .34; F = 29.95$ ; Significance level: \*\* = .00

Adjusted  $R^2 = .02; F = 4.39$ ; Significance level: \* = .03

Further, interaction graphs were plotted to show the effect of moderator at different levels. The interaction graph showed that the relationship between the independent variable (i.e., skill variety) and dependent variable (i.e., job satisfaction) was stronger when the level of moderating variable (i.e., polychronicity) was high as compared to when it was low. Therefore, H2 was also supported. The interaction graph is given in [Figure 2](#).

**Figure 2**

*Interaction Plots for Polychronicity as Moderator in the Relationship between Skill Variety and Job Satisfaction*



## Discussion

Based on person-job fit theory (Edwards, 1991) and JCM (Hackman & Oldham, 1975, 1976), the sole purpose of this study was to match the skill variety characteristic of a job and polychronic values of employees and find out their interactive effect on the job satisfaction level of employees. First, based on the job design theory of JCM, we proposed the positive association between skill variety and job satisfaction. Consistent with the JCM and empirical studies (Hackman & Oldham, 1975, 1976; Keena et al., 2020; Kumar, et al., 2011; Meijer, 2022; Rai & Maheshwari, 2020; Serhan & Tsangari, 2022), this study found skill variety as the significant predictor of job satisfaction level of the employees of garment's franchises. Further, based on person-job fit theory (Edwards, 1991), focusing on individual characteristics, we proposed that employees with polychronic values can best fit in the jobs offering the use of skill variety because people with polychronic values anticipate doing multiple tasks simultaneously as part of normal routine work rather than interruptions (Bluedorn et al., 1999). Consistent with the person-job fit theory (Edwards, 1991), we found polychronicity as the significant moderator in the relationship between skill variety and job satisfaction. Employees with polychronic values perceived job satisfaction levels more from the jobs offering skill variety in comparison to employees with monochronic values.

## Managerial Implications

Based on the findings of this study, skill variety can be recommended as the best alternative to avoid the boredom and fatigue resulting from doing repetitive tasks simultaneously. Therefore, HRM managers should design jobs offering skill variety. Further, based on the person-job fit theory (Edwards, 1991), we argue that a job offering a variety of different activities is likely to be executed well by employees with polychronic values. Focusing on the behavioural aspects of the jobs, HRM managers designing the jobs of employees should take into account both the



job characteristics and the individual's characteristics. A fit between the job such as jobs offering skill variety, and the employees' values such as polychronicity can yield the best possible outcome i.e., job satisfaction.

### **Limitations and Future Directions**

We have used cross sectional data. The use of longitudinal data may further validate and generalize our findings. There are many individual characteristics that can be used as moderator in the relationship between skill variety and job satisfaction such as big five personality traits. A comparative study of jobs offering repetitive tasks and skill variety can further provide more fruitful insights.

### **Declarations**

#### **Acknowledgements**

Not applicable.

#### **Disclosure Statement**

No potential conflict of interest was reported by the authors.

#### **Ethics Approval**

Not applicable.

#### **Funding Acknowledgements**

Not applicable.

### **Citation to this article**

Kumar, A., Memon, B., Sohu, Z. H., & Maharvi, M. W. (2023). Polychronicity as moderator in the relationship between skill variety and job satisfaction. *International Journal of Organizational Leadership*, 12(3), 269-276. <https://doi.org/10.33844/ijol.2023.60369>

### **Rights and Permissions**



© 2022 Canadian Institute for Knowledge Development. All rights reserved.

International Journal of Organizational Leadership is published by the Canadian Institute for Knowledge Development (CIKD). This is an open-access article under the terms of the [Creative Commons Attribution](#) (CC BY) License, which permits use, distribution, and reproduction in any medium, provided the original work is properly cited.

### **References**

- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: testing and interpreting interactions*: Sage Publications.
- Andriani, A., & Disman, D. (2020). Polychronicity in the hotel industry in Bandung city. *Advances in Business, Management and Entrepreneurship* (pp. 709-713). CRC Press.
- Arndt, A., Arnold, T. J., & Landry, T. D. (2006). The effects of polychronic-orientation upon retail employee satisfaction and turnover. *Journal of Retailing*, 82(4), 319–330.

- Bluedorn, A. C., Kalliath, T. J., Strube, M. J., & Martin, G. D. (1999). Polychronicity and the Inventory of Polychronic Values (IPV): The development of an instrument to measure a fundamental dimension of organizational culture. *Journal of Managerial Psychology, 14*(3/4), 205–231. <https://doi.org/10.1108/02683949910263747>
- Daskin, M. (2015). Antecedents of extra-role customer service behaviour: polychronicity as a moderator. *Anatolia, 26*(4), 521–534.
- Edwards, J. R. (1991). *Person-job fit: A conceptual integration, literature review, and methodological critique*. John Wiley & Sons.
- Grant, A. M., Fried, Y., Parker, S. K., & Frese, M. (2010). Putting job design in context: Introduction to the special issue (Vol. 31, pp. 145–157). Wiley Online Library.
- Hackman, J. R., & Oldham, G. R. (1974). *The Job Diagnostic Survey: An instrument for the diagnosis of jobs and the evaluation of job redesign projects*. Technical report No. 4, Department of Administrative Sciences Yale University.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the job diagnostic survey. *Journal of Applied Psychology, 60*(2), 159.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*(2), 250–279.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7 ed.). Upper Saddle River, NJ: Prentice Hall.
- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavior Research Methods, 41*(3), 924–936.
- Hui, C., Lee, C., & Niu, X. (2010). The moderating effects of polychronicity and achievement striving on the relationship between task variety and organization-based self-esteem of mid-level managers in China. *Human relations, 63*(9), 1395–1416.
- Jang, J., & George, R. T. (2012). Understanding the influence of polychronicity on job satisfaction and turnover intention: A study of non-supervisory hotel employees. *International Journal of Hospitality Management, 31*(2), 588–595.
- Keena, L. D., Lambert, E. G., Haynes, S. H., May, D., & Buckner, Z. (2020). Examining the relationship between job characteristics and job satisfaction among Southern prison staff. *Corrections, 5*(2), 109–129.
- Kumar, A., Abbas, Q., Ghumro, I. A., & Zeeshan, A. (2011). Job characteristics as predictors of job satisfaction and motivation. *Asian Journal of Business and Management, 1*(4), 206–216.
- Kumar, A., Arain, G. A., & Channa, K. A. (2019). Relationship Between Organizational Injustice and Work Interference with Family: The Role of Social Support. *South Asian Journal of Human Resources Management, 6*(2), 129–155. <https://journals.sagepub.com/doi/10.1177/2322093719828889>
- Meijer, D. (2022). *You only had one task: the influence of task variety on job satisfaction among call center employees* [Master's thesis, Tilburg University]. Worldcat.
- Nunnally, J. C. (1978). *Psychometric theory*. McGraw-Hill.
- Pachler, D., Kuonath, A., Specht, J., Kennecke, S., Agthe, M., & Frey, D. (2018). Workflow interruptions and employee work outcomes: The moderating role of polychronicity. *Journal of Occupational Health Psychology, 23*(3), 417.
- Rai, A., & Maheshwari, S. (2020). Exploring the mediating role of work engagement between the linkages of job characteristics with organizational engagement and job satisfaction. *Management Research Review, 44*(1), 133–157.
- Robbins, S. P., & Coulter, M. K. (2007). *Management*. Pearson Prentice Hall.
- Saunders, M., Lewis, P., & Thornhill, A. (2015). *Research methods for business students* (7 ed.). Pearson Education. <https://worldcat.org/title/1001708543>
- Serhan, C., & Tsangari, H. (2022). The mediating effects of psychological states on the relationship of job dimensions to personal and work outcomes, for fresh graduates. *Journal of Management Development, 41*(4), 223–239. <https://doi.org/10.1108/jmd-10-2021-0274>
- Zhu, Y., & Smith, S. A. (2019). Information and Communication Technology Support for Contextualization, Polychronic Values, and Job Satisfaction: Evidence From Virtual Teams. *International Journal of Business Communication, 23*29488419832075. <https://doi.org/10.1177/2329488419832075>