

## **Relationship between Work Autonomy and Work Place Creativity as Moderated by Task Complexity at University Level**

### **Ghazala Noureen**

Chairperson of Department of Secondary Education  
Lahore College for Women University, Lahore  
g\_noureen@yahoo.com

### **Anam Noshaba**

Visiting Assistant Professor  
Lahore College for Women University, Lahore  
anam\_pk2006@yahoo.com

### **Tahseen Arshad**

Visiting Assistant Professor  
Lahore College for Women University, Lahore

### **Jannat Younis**

M.Phil Scholar, Lahore College for Women University, Lahore

---

### **KEY WORDS**

---

Work Autonomy, Work Place Creativity, Task Complexity, University Level.

### **ABSTRACT**

---

Many old and new organizational practices have faith in notion of autonomy and workplace creativity. Autonomy refers to freedom of the will or actions by an individual working in any organization to perform assigned tasks. It can be further described as employee's liberty, freedom, and will in performing tasks of the job. Undeniably, creativity and innovation are cultivated by cultures have foundations on strong shared values. Utilization of employee innovative ideas flourishes teachers job performance and minimize the complexity of task in organizations. The aim of the study was to investigate the relationship between work autonomy and work place creativity as moderated by task complexity at university level. Correlational research design was used. Data was collected through online questionnaire. Findings of the study revealed that there is a positive strong relationship between work autonomy and work place creativity. This relationship has significant moderation effect of task complexity. It is concluded that work autonomy effecting workplace creativity in a lesser degree when task complexity was low whereas in case of high task complexity, work autonomy was affecting workplace creativity greatly.

---

## Introduction

Organizations can be categorized as for profit and non-profit organizations. Both types of organizations are structured and managed in such a way to achieve maximum goals. Purpose of non-profit (service providing) organizations are generally to provide social services for betterment of society. All level of educational institutions falls in this category. This research study focused on universities and aimed to investigate the relationship between teacher's work autonomy and workplace creativity as moderated by task complexity. Rapid technological advancement of 21century transforming higher education that touch work processes and occupational structures of universities. New technologies provide more work autonomy to teachers and enable them to actively engage students in learning by reducing the amount of class time where students sit passively listening to lectures. That is why teachers are looking for greater flexibility and independence that provide more individualized work schedules. Recent research findings revealed that outcome variables and work context greatly influenced the attitudinal, behavioral, cognitive aspects of work force (Theurer, Tumasjan, & Welp, 2018).

In this competitive global environment organizations are trying hard for quality of work while providing conducive workplace environment, employee's wellbeing and congenial relationships between employees. Work autonomy enable employees to become more determined in handling daily issues at workplace, motivate them to increase their morale and commitment, independence, flexibility, and autonomy. These factors played significant role in eradicating human error at work place and improve organizational effectiveness. Work autonomy is demarcated as the extent to which the work offers substantial freedom, giving free hand and options to the individual in scheduling their work and provides ways to achieve objectives (Parker, Axtell & Turner, 2001). Organizations employed work autonomy in order to utilized employee's full potential and competence (Wheatley, 2017; Yawalkar, 2020).

Lin, et al. (2013) investigated the effect of work autonomy and its relationship with work outcomes in Taiwan Community Health Centers. Findings of the study has revealed that job autonomy has positively correlated with work outcomes. Saha (2016) conducted the research aimed to investigate the effect of work design on work productivity. The focus of the research revolved around two factors that directly influenced organizational climate and climate within the individual teams. Majority of the respondents (93%) has confirmed that workplace design increased the productivity. It is concluded that workplace productivity has strong positive relationship with the services provided at work place.

Malinowska, et al. (2018) selected variables work i.e. engagement and workaholism based on self-determinant theory and the job demands theoretical model. The study finding has proved that job autonomy is not related to engagement and workaholism. It was also found that work autonomy can improve efficiency and effectiveness of individuals and organizations.

Naqvi, et al., 2013 intended to find out relationship between job autonomy, job satisfaction, and organizational commitment. It was found that job autonomy and job satisfaction directly link each other that ultimately increase commitment. Work autonomy has been researched with some other variables such as innovative work behavior, motivation, commitment, job performance, task complexity and creativity.

The conceptualization of work autonomy and workplace creativity reflect the historic and economic environment of an organization (Bakker et al. 2007). Workplace creativity is not only the discovery of new ideas but also to test new ideas and strategies to accomplish organizational tasks that involve risk because fear of unseen is strong emotion particularly when it means you might fail. Creativity is a self-modification of an individual creative ideas, group and organizational characteristics. Things that directly affect the creative performance of employee is social and contextual factors

In an organization set up, creative performance of employee's is a major task that might be complex, easy or flexible. Perception of flexibility would be different for every individual. Task complexity can be defined as exhilarating and challenging demands of certain tasks (Valcour, 2007). The most important determinants of human behavior and task performance is task complexity. It requires additional rationality and exertions that pushes worker for creative acts connected to some tasks. Flexibility in work situation offers backing and autonomy for accomplishment of complex tasks, in that way motivate workers innovative performance (Shalley et al. 2009).

It was also verified empirically that task complexity is significantly related creative performance as an autonomous contributor. Creativity and progression no doubt is cherished by values that are determined by strong, shared ethics. Creative thinking required employee's empowerment in term of task performance. Innovative employ always demands respect and recognition in return of their services. They required that their ideas would be heard and valued by their leaders. This appreciation improved self-assurance, confidence and creativity.

Three aspects of work autonomy i.e. method, schedule and criteria when mixed with task complexity, it was found to be linked significantly. Task appearances positively impact employees' innovative performance (Langfred, 2005).

Therefore, it was needed to examine the relationship between these variables along with moderated effect of task complexity. This study aimed

to explore the relationship between work autonomy and work place creativity as moderated by task complexity at university level.

### **Objectives of the Study**

Following were the objectives of the study:

1. To explore the relationship between work autonomy and workplace creativity at university level.
2. To find out the relationship between work autonomy and task complexity at university level.
3. To investigate the relationship between workplace creativity and task complexity at university level.
4. To identify the moderating effect of task complexity on the relationship between work autonomy and workplace creativity at university level.

### **Hypothesis**

**H<sub>01</sub>:** There is no significant relationship between work autonomy and workplace creativity at university level.

**H<sub>02</sub>:** There is no significant relationship between work autonomy and task complexity at university level.

**H<sub>03</sub>:** There is no significant relationship between workplace creativity and task complexity at university level.

**H<sub>04</sub>:** There is no significant moderating effect of task complexity on the relationship between work autonomy and workplace creativity at university level.

### **Method and Procedure**

This study was conducted for studying the relationship between work autonomy and workplace creativity as moderated by task complexity.

#### **Research design**

Correlational research design was used to explore relationship autonomy and work place creativity as moderated by task complexity at university level. Correlational research design was selected because present study tried to find out the relationship between above mentioned quantifiable variables without any causation. Correlational research is ideal for gathering data quickly from natural settings. Three universities were selected as a cluster and ten common departments were selected from each university. Six teachers from each department were selected conveniently. Total 240 teachers were selected as a sample of the study. Out of all, 212 questionnaires were received back while 12 were incomplete. For data analysis 200 questionnaires were used. Three instruments were used to collect data. Cronbach's alpha value of three instruments is given below.

Table 1

*Reliability Coefficients*

Variables	No. of items	Reliability
Work Autonomy	26	.821
Task Complexity	9	.728
Workplace Creativity	25	.859

Table indicates the reliability coefficient of all the variables of the study. Total numbers of items related to work autonomy are 26, and reliability coefficient is .821. Total numbers of items related to task complexity are nine and reliability coefficient is .728. Total numbers of items for workplace creativity are 25 and reliability coefficient is .859.

Fig 1: Conceptual Framework

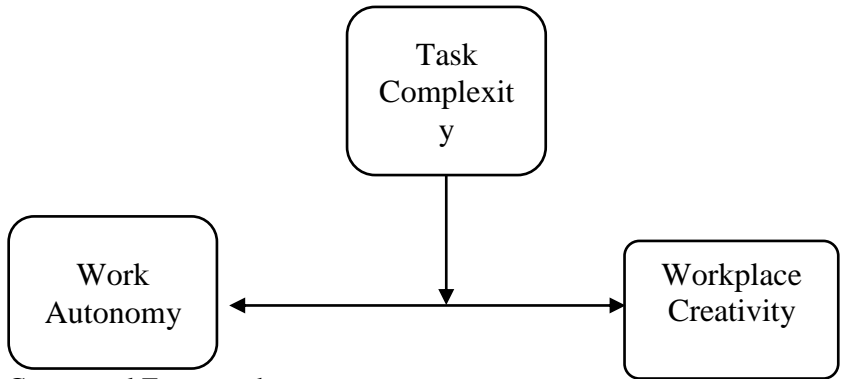


Fig 1: Conceptual Framework

**Results of the Study**

Data was analyzed while using different statistical techniques.

Table 2

*Correlation between variables of study*

Variables	Work Autonomy	Workplace Creativity	Task Complexity
Work Autonomy	1	.695**	.764**
Workplace Creativity	.695**	1	.664**
Task Complexity	.764**	.664**	1

\* p ≤ .10, \*\* p ≤ .05.

Table 2 shows highly significant correlation between variables. So, Hypothesis stating that *There is no significant relationship between work autonomy and task complexity* was rejected because value  $r=.764$  indicates significant correlation between work autonomy and task complexity.

Hypothesis, *There is no significant relationship between work autonomy and workplace creativity*, is rejected because ( $r=.695$ ) indicates significant correlation between work autonomy and workplace creativity. Hypothesis, *There is no significant relationship between workplace creativity and task complexity*, is rejected because value  $r=.664$  indicates significant correlation between workplace creativity and task complexity.

Table 3  
*Effect of Work autonomy on Workplace Creativity as Moderated by Task Complexity Workplace Creativity*

Model	Effect ( $\beta$ )	T	P	LLCI	ULCI	R <sup>2</sup>	R <sup>2</sup> Change
Constant	38.352	4.863	.000	22.800	53.905	.639	.0205
Work Autonomy	.1133	.686	.494	-.213	.439		
Task Complexity	-.595	1.452	.148	-1.404	.214		
WA $\times$ TC	.0243	3.332	.001	.009	.039		

Table 3 describes the results of the moderation analysis using regression analysis through process Macro for SPSS. This table indicates the value of interaction of work autonomy  $\times$  task complexity ( $\beta$ ) = .024, which shows 24% of variance due to predictor variable. The R<sup>2</sup> value = .639 which is contribution of interaction that is 63%. It is concluded that work autonomy was significantly related to task complexity and workplace creativity significantly moderated the relationship between that work autonomy and task complexity, as the interaction effect of work autonomy  $\times$  task complexity ( $\beta$  = .024,  $p=.001$ ) was significant. This interaction is elaborated in the figure 1.

Table 4  
*Conditional Effects of Work Autonomy on Workplace Creativity as Moderated by Task Complexity*

	Task Complexity	$\beta$	t	P	LLCI	ULCI
Work Autonomy	Low	.434	5.11	<.001	.266	.601
	Moderate	.538	7.89	<.001	.404	.673
	High	.643	10.08	<.001	.517	.769

The conditional affects further makes it clear that work autonomy was effecting workplace creativity in a lesser degree when task complexity was low ( $\beta= .434$ ,  $p= .000$ ), whereas in case of high task complexity, work autonomy was effecting workplace creativity greatly ( $\beta= .643$ ,  $p= .000$ ). These interactions are illustrated in the Figure 2

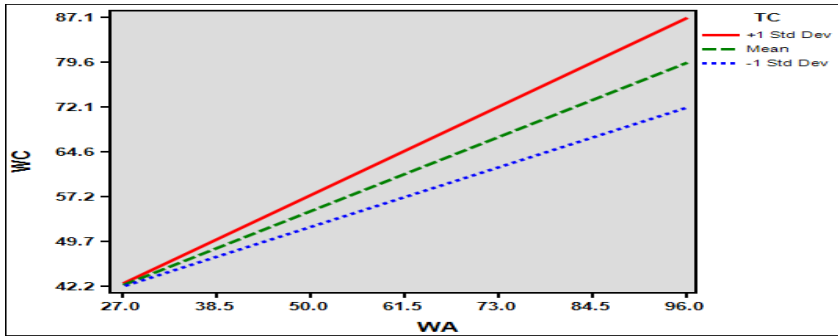


Figure 2: Interaction of Work Autonomy and Workplace Creativity as moderated by task complexity.

**Discussion**

It is stated in previous studies that if institutions offer choice to their worker to select the standards for their task performance and appraisal, they feel more empowered and authorized to devise a strategy for self-assessment. Owing to self-developed strategies, employees become willing to overcome weakness associated to their tasks. Feeling of being self-sufficient from employees’ side opens new horizon and opportunities for organization as well as for individuals. Such independence effects every aspect of organization i.e. structure, climate, culture and leadership style (Parker, 2001). When people are allowed to work independently, they utilized their full potential in term of their mental faculties and creativity. When we used term creativity at workplace; it means level of commitment of workers to take risk and attempt to bring innovations and originalities in solving day to day problem and enhancing chances of organization’s survival and stability in current competitive global milieu. using imagination insight and problem-solving abilities. Hashamdar & Rangriz, (2017) investigated the association between three variables i.e. Autonomy, creativity and language proficiency. Finding of that research also indicated significant relationship among autonomy and creativity of the students. Certain other studies verified strong relationship among above mentioned variable especially in teaching learning situations. Creative persons are anxious about engaging themselves in intellectually stimulating actions (Langfred, 2005; Nosratinia and Zaker, 2013).

The major findings of study reveal that university teachers showed consensus that their job description permit them to make decisions. In other word there is flexibility in a task performance as far as universities are concerned. Teachers were also in a view that tasks are simple at their work place. Factor related to workplace creativity indicates that everyday routine doesn’t impede on my creativity. Autonomy is characterized as an important feature of employees’ task performance at work place.

The findings of study revealed significant correlation between work autonomy and task complexity. It also indicated significant correlation between work autonomy, workplace creativity task complexity. Many studies are conducted to find the relationship between autonomy and creativity at workplace but this study is unique in a sense that researchers tried to investigate the moderating effect of task complexity with work autonomy and work place creativity. Task complexity significantly moderated the association among work autonomy and workplace creativity. This finding is supported by the finding of Sia and Appu (2015). They also found task complexity as a string moderator between the relationship of work autonomy and workplace creativity. Moderator variable also indicate strength and weakness of relationship among work autonomy and workplace creativity as when task complexity is low work autonomy effects workplace creativity in a lesser degree while in case of high task complexity, work autonomy was affecting workplace creativity greatly.

### **Recommendation**

On the basis of findings, it is recommended that future researches may be carried out while taking larger sample and using other sampling technique to contribute to literature about these variables. Researches may be carried out by selecting school level teachers as school education is backbone of education system.

### **References**

- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of educational psychology, 99*(2), 274.
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences. *Journal of applied psychology, 92*(6), 1524.
- Hashamdar, M., & Rangriz, S. (2017). The relationship between Learners' autonomy and creativity. *Journal of Applied Linguistics and Language Research, 4*(5), 135-140.
- Langfred, C. W. (2005). Autonomy and performance in teams: The multilevel moderating effect of task interdependence. *Journal of management, 31*(4), 513-529.
- Lin, B. Y. J., Lin, Y. K., Lin, C. C., & Lin, T. T. (2013). Job autonomy, its predispositions and its relation to work outcomes in community health centers in Taiwan. *Health promotion international, 28*(2), 166-177.
- Malinowska, D., Tokarz, A., & Wardzichowska, A. (2018). Job autonomy in relation to work engagement and workaholism: Mediation of autonomous and controlled work motivation. *International Journal of Occupational Medicine and Environmental Health, 31*(4).



- Morgeson, F. P., Delaney-Klinger, K., & Hemingway, M. A. (2005). The Importance of Job Autonomy, Cognitive Ability, and Job-Related Skill for Predicting Role Breadth and Job Performance. *Journal of Applied Psychology, 90*(2), 399–406.
- Naqvi, S. R., Ishtiaq, M., Kanwal, N., & Ali, M. (2013). Impact of job autonomy on organizational commitment and job satisfaction: The moderating role of organizational culture in fast food sector of Pakistan. *International Journal of Business and Management, 8*(17), 92.
- Nosratinia, M., & Zaker, A. (2014). Metacognitive attributes and liberated progress: The association among second-language learners' critical thinking, creativity, and autonomy. *Sage Open, 4*(3), 2158244014547178.
- Parker, S. K., Axtell, C. M., & Turner, N. (2001). Designing a safer workplace: Importance of job autonomy, communication quality, and supportive supervisors. *Journal of Occupational Health Psychology, 6*(3), 211–228.
- Saha, S. (2016). A study on impact of workplace design on employee's productivity in selected it companies in Pune region. *International Journal of Business and General Management, 5*(1), 2319-2267.
- Shalley, C. E., Gilson, L. L., & Blum, T. C. (2009). Interactive effects of growth need strength, work context, and job complexity on self-reported creative performance. *Academy of Management journal, 52*(3), 489-505.
- Sia, S. K., & Appu, A. V. (2015). Work autonomy and workplace creativity: Moderating role of task complexity. *Global Business Review, 16*(5), 772-784.
- Theurer, C., Tumasjan2, & Welpe, I. (2018). *Contextual work design and employee innovative work behavior: When does autonomy matter?* [Ebook] (pp. 1/35). Toronto: creative common attributes. Retrieved from <https://doi.org/10.1371/journal.pone.0204089>
- Valcour, M. (2007). Work-based resources as moderators of the relationship between work hours and satisfaction with work-family balance. *Journal of applied psychology, 92*(6), 1512.
- Wheatley, D. (2017). Autonomy in paid work and employee subjective well-being. *Work and Occupations, 44*(3), 296-328.
- Yawalkar, V. V. A Study of Work Autonomy and Its Impact on Efficiency at the workplace; with reference to employees working in Pune City.  
....\*\*\*....

**Citation of this Article:**

Noureen, G., Noshaba, A., Arshad, T. & Younis, J. (2021). Relationship between Work Autonomy and Work Place Creativity as Moderated by Task Complexity at University Level. *Pakistan Journal of Educational Research and Evaluation, 9*(2), 40-49.