

Job Stress Determinants: A Study on Job Order Employees of State Universities in Samar

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Abstract

Work motivation and performance among job order employees in different state universities in Samar is a determinant to the achievement of organization goals. Similar studies conducted focused on private companies, and mostly on faculty members in government agencies. The purpose of this study is to identify the various stressors that are mostly experienced that affect work productivity levels, and a factor to high job order employee turnover. Using the Principal Component Analysis, the most important variables were identified. Work attitudes among co-workers, heavy workload and job advancement and security were found to be the most significant stressors. Further studies with a wider geographical scope may be conducted for comprehensive results appropriate for improving work environment and policy formulation.

Keywords: Job Order, Job Stress, Work Performance, Samar

Introduction

Job tasks impacts stress. This is true especially to the different work environment employees are working at. Job stress can lead to different health concerns resulting to poor job performances affecting decision-making. Most of the time these lead to difficulty in teamwork thereby leading to failure to achieve organizational goals. Job order employees in different state universities in Samar do a lot of work. They also often report to different superiors adding pressure to their work. Oftentimes, we cannot consider high performance work from them because of stress and low motivational factors. These job order employees resign if they can no longer perform their jobs well. The increasing amounts of workloads given to them lead to decreasing performance while their salaries are oftentimes provided late. Job stress puts great impact on the different activities being conducted by job order employees.

Stress affects the performance of employees in their workplace. As cited by Wu et al. (2021). "Job stress is a type of stress that is caused by conditions in the workplace and has negative impact on personal performance and/or overall physical and mental health." Work stress not only affects individuals but the entire flow of tasks. It is like a chain reaction. Wu et al. (2021) further cited that work stress pertains to work contents and tasks being carried out. Stress could also pertain to the negative emotions or tensions felt by an employee during the conduct of work. According to Kim et al. (2018), job stress could add up to progress of negative mental well-being results of a person. A major factor to reduce the risk of job stress is resiliency. Resiliency is effective and positive adaptation of an individual despite the surrounding tension. The increased risk in relation to job stress decreases safety and performance of individuals. According to Arshadi & Damiri (2013), "Employees

who experience high level of job stress are more likely to be unhealthy, poorly motivated, less productive and less safe at work.” An organization having employees with high level of job stress may not become successful in the industry.

In state universities and colleges, job stress cannot be avoided. This is a burning issue of human resource management. There are quite a number of researches about stress in relation to work. Many organizations try to identify determinants of job stress, its significances, and the different ways to lessen them. Many of these researches are conducted by private organizations. There are a few studies conducted so far on state universities and colleges mainly focusing on faculty. The aim of this research is to find out the leading job stressors that job order employees in state universities and in Samar are undergoing.

Methodology

The researchers used descriptive research in the conduct of this study. The participants of this study were the job order employees of the state universities in the province of Samar, Philippines. The Civil Service Commission (2017) defined Job Order (JO) as a piece of work or intermittent or emergency jobs. The researchers identified one hundred two (102) participants from the universities in Samar such as Northwest Samar State University – main campus, Northwest Samar State University – San Jorge campus, Samar State University – main campus, and Samar State University – Mercedes campus using judgment sampling. The researchers used a 5-point Likert scale questionnaire. The Principal Component Analysis through Kaiser-Meyer-Olkin and Bartlett's Test was identified as the appropriate analysis for this study.

Results and Discussions

Table 1 shows the number of participants who joined from the different universities in Samar.

Table 1. Participants from different universities in Samar

	N	%
NwSSU Main Campus	55	53.9%
NwSSU San Jorge Campus	4	3.9%
SSU Main Campus	42	41.2%
SSU Mercedes Campus	1	1.0%

Table 2 shows the mean, standard deviation, and number of participants in the conduct of this study. The mean values indicate the different variables (stressors) in the state universities in Samar.

Table 2. Descriptive Statistics

	N	Mean	Std. Deviation
Excessive Workload	102	3.47	.982
Work-Life Balance	102	2.53	1.123
Job Security	102	4.12	1.213
Rate	102	4.03	1.085
Chance Promotion	102	3.99	1.263
Working Hours	102	2.74	1.024

	N	Mean	Std. Deviation
Management Style	102	1.79	1.075
Non-Cooperative Colleagues	102	1.96	.974
Ambiguity of Role	102	1.73	1.064
Insufficient Resources	102	2.44	1.077
Lack of Professionalism	102	2.13	1.123
Incentives	102	4.18	1.164
Work Against Values	102	1.55	.828
Keeping Up with Technology	102	1.53	.829
Skills Requirement	102	1.86	.965
High Client Demands	102	2.02	1.005
Poor Organization Culture	102	1.98	1.099
Valid N (listwise)	102		

Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.831
Bartlett's Test of Sphericity	Approx. Chi-Square	1082.026
	df	136
	Sig.	.001

KMO Measure (Kaiser, 1974) : $KMO \geq 0.9$ = Marvelous
 $0.8 \leq KMO < 0.9$ = Meritorious
 $0.7 \leq KMO < 0.8$ = Middling
 $0.6 \leq KMO < 0.7$ = Mediocre
 $0.5 \leq KMO < 0.6$ = Miserable
 $KMO < 0.5$ = Unacceptable

A Kaiser-Meyer-Olkin test was conducted to know the index of linear relationships between the variables. The KMO test also identified that the Principal Component Analysis was the appropriate test used. As shown in Table 3, the KMO measure is 0.831 which is equivalent to “meritorious” indicating that the number of samples for this study was adequate. Bartlett’s test shows the variables’ relationship strengths. The Bartlett’s test of sphericity conducted in this study is significant indicating a strong variables’ correlations. A similar test was conducted by Sultana (2021) in her study considering KMO if the number of samples was sufficient. Sultana (2021) removed the variables with values less than 0.5 in her study. Kaiser-Meyers-Olkin values equal to or greater than 0.5 but less than 0.6 are considered mediocre (Kaiser, 1974).

Principal Component Analysis

The Principal Component Analysis (PCA) was conducted to determine the most important variables on the job order employees in the state universities in Samar.

Communalities

Each communality is proportion of the variance of every variable accounted through principal component analysis. Table 4 below shows the variable variances comprised by the extracted factors. As shown, the highest percentage among the variables are non-cooperative colleagues (81.5%),

job security (81.4%), chance promotion (80.5%), and Excessive Workload (80.2%) while among the lowest are work-life balance (57.4%) and high client demands (49.4).

Table 4. Communalities

	Initial	Extraction
Excessive Workload	1.000	.802
Work-Life Balance	1.000	.574
Job Security	1.000	.814
Rate	1.000	.764
Chance Promotion	1.000	.805
Working Hours	1.000	.639
Management Style	1.000	.682
Non-Cooperative Colleagues	1.000	.815
Ambiguity of Role	1.000	.680
Insufficient Resources	1.000	.706
Lack of Professionalism	1.000	.734
Incentives	1.000	.785
Work Against Values	1.000	.782
Keeping Up with Technology	1.000	.658
Skills Requirement	1.000	.753
High Client Demands	1.000	.494
Poor Organization Culture	1.000	.685

Extraction Method: Principal Component Analysis.

Total Variance

Table 5 shows the factors that can be extracted from the PCA along with the eigenvalues, variance percentage attributable to the factors, and cumulative variance of the factors and previous factors. The first factor, as shown in Table 5, accounts for 36.662% of the variance, the second for 20.160% of the variance, the third for 7.815% of the variance, and the fourth for 6.975% of variance. Components one to four were retained and the fifth components onwards were not.

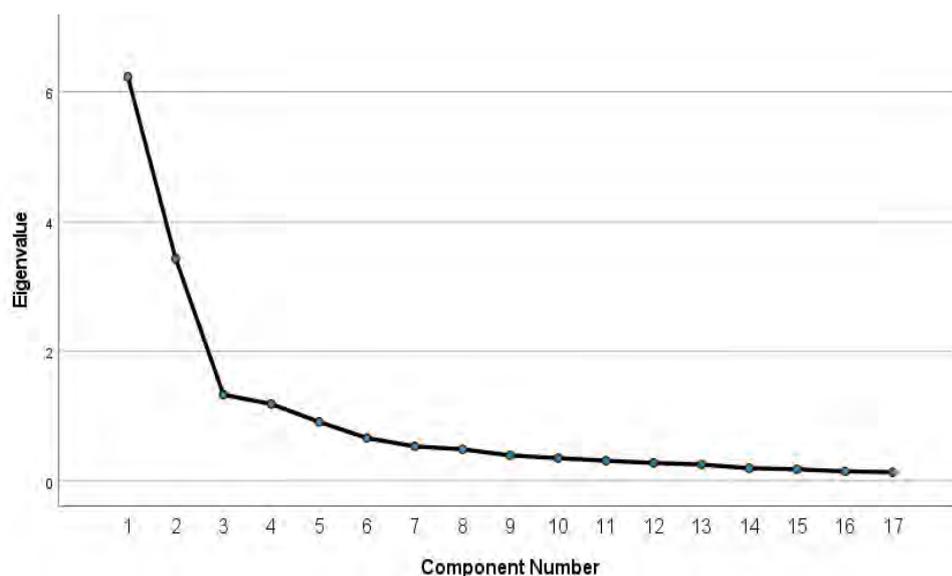
Table 5. Total Variance

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.233	36.662	36.662	6.233	36.662	36.662	3.491	20.535	20.535
2	3.427	20.160	56.822	3.427	20.160	56.822	3.383	19.903	40.438
3	1.329	7.815	64.637	1.329	7.815	64.637	3.216	18.918	59.356
4	1.186	6.975	71.612	1.186	6.975	71.612	2.084	12.256	71.612
5	.910	5.351	76.963						
6	.660	3.884	80.847						
7	.533	3.135	83.982						

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
8	.487	2.865	86.846						
9	.393	2.313	89.159						
10	.350	2.061	91.220						
11	.311	1.830	93.050						
12	.276	1.623	94.672						
13	.252	1.483	96.155						
14	.195	1.148	97.303						
15	.178	1.047	98.351						
16	.147	.865	99.215						
17	.133	.785	100.000						

Extraction Method: Principal Component Analysis.

Scree Plot



Graph 1. Scree Plot

The scree plot shows the total variance of every eigenvalue versus its components. There are 17 components in the scree plot. Visual inspection of the graph shows the component 3 is where the inflection point is. All the components beyond this are non-significant.

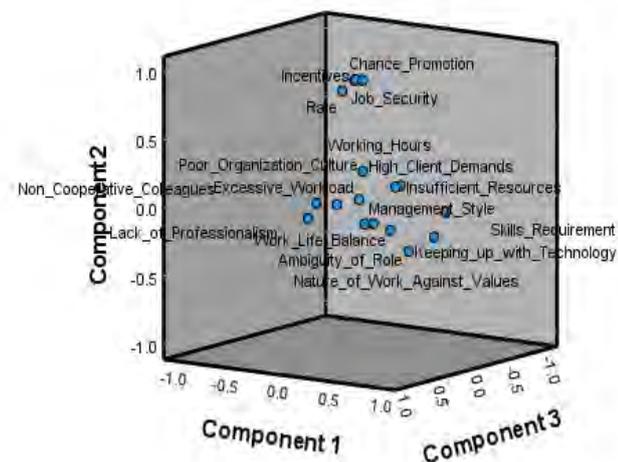
Rotated Component matrix

Rotated component analysis was used to further determine the factors under every component. Table 6 shows where the various factors are loaded on every component.

Table 6. Rotated Component Matrix^a

	Component			
	1	2	3	4
Skills Requirement	.827			
Keeping up with Technology	.784			
Nature of Work Against Values	.725		.372	
Insufficient Resources	.658		.458	
Ambiguity of Role	.636		.499	
High Client Demands	.557			
Job Security		.900		
Chance Promotion		.896		
Incentives		.885		
Rate		.820		
Non-cooperative Colleagues			.856	
Lack of Professionalism			.825	
Poor Organization Culture			.740	
Management Style	.484		.634	
Excessive Workload				.871
Work-Life Balance				.654
Working Hours				.645
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization. ^a				
a. Rotation converged in 5 iterations.				

Figure 1 below shows visual representation of the loadings plotted in a 3-dimensional space. The plot shows how closely the items are related to each other and to the three components.

**Figure 1. Component Plot in Rotated Space**

The results of this study is in line with research conducted by Trivellas et al. (2013) which states that job stress in relation to excessive workload and conflict are associated with factors such as career opportunities, physical environment, management style, rewards, job security, and job enrichment. The study of Trivellas et al. (2013) showed that job stress originating from career development and autonomy results to the negative impact in relation to job enrichment, management style and career opportunities. This shows that stress is covered by many factors influencing an employee negatively. Muis et al. (2021) suggested that to reduce job stress, there should be enough rest time to refresh the body and to be prepared for physical and mental work. On the other hand, the study of Siddiqui et al. (2021) showed that gender has a major role in considering job stress of individuals, with males having a higher level of job stress as compared to females. Although this study did not consider the correlation of job stress to different factors affecting stress levels of individuals, this could be used as a tool for further conclusive researches.

Role ambiguity appears to be not much of a concern to job order employees serving as academic staff in state universities as shown in results of principal component analysis. Instead, in the Philippines, particularly in Samar, job order employees who are mostly academic staff in state universities are provided with excessive workload, as shown in this study, which makes them unproductive. Excessive workload is a serious concern of job order employees because they are being maximized to do a lot of work beyond their capacity, not to mention their salary doesn't match the work they are doing. In contrast, Gharib et al. (2016) in their research which focused on the factors such as job stress (workload, role conflict, and role ambiguity) and job performance concluded that job stress does not negatively affect the academic staff if they are provided with medium level workload.

Conclusion

Fifty-five (53.9%) job order employees (participants) from Northwest Samar State University – main campus joined the study, 42 (41.9%) from Samar State University – main campus, 4 (3.9%) from Northwest Samar State University – San Jorge campus, and 1 (1%) from Samar State University – Mercedes campus. The results of this study showed that the major stressors to job order employees are non-cooperative colleagues, job security, chance promotion, and excessive workload. It is favorable to create a working environment for job order employees where colleagues are cooperative, with higher rates, without excessive workload, and one which gives them a chance to become regular employees leading to chance promotion. These will promote and develop a better workforce for state universities in the area. In addition, these will encourage job order employees to provide better services.

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References

- Arshadi, N., & Damiri, H. (2013). The Relationship of Job Stress with Turnover Intention and Job Performance: Moderating Role of OBSE. *Procedia - Social and Behavioral Sciences*, 84(2003), 706–710. <https://doi.org/10.1016/j.sbspro.2013.06.631>
- Civil Service Commission. (2017). *CSC clarifies guidelines on Job Order and Contract of Service*

- workers. <http://web.csc.gov.ph/new-updates/1370-csc-clarifies-guidelines-on-job-order-and-contract-of-service-workers.html>
- Gharib, M. N., Jamil, S. A., Ahmad, M., & Ghouse, S. (2016). The impact of job stress on job performance: A case study on academic staff at dhofar university. *International Journal of Economic Research*, 13(1), 21–33.
- Kaiser, H. F. (1974). Analysis of factorial simplicity. *Psychometrika*, 39(1), 31–36.
- Kim, J. I., Park, H., & Kim, J. H. (2018). The mediation effect of PTSD, perceived job stress and resilience on the relationship between trauma exposure and the development of depression and alcohol use problems in Korean firefighters: A cross-sectional study. *Journal of Affective Disorders*, 229(September 2017), 450–455. <https://doi.org/10.1016/j.jad.2017.12.055>
- Muis, M., Wahyu, A., Mallapiang, F., Darwis, A. M., Thamrin, Y., & Rezkiah, N. (2021). *The determinant of work stress on bank employees in Makassar, Indonesia*. <https://doi.org/10.1016/j.gaceta.2021.10.068>
- Siddiqui, A., Jia, H., He, Y., Li, Y., Zhen, S., Chiang, S., Wu, H. E., He, S., & Zhang, X. (2021). Correlation of Job stress and self-control through various dimensions in Beijing Hospital staff. *Journal of Affective Disorders*, 294(July), 916–923. <https://doi.org/10.1016/j.jad.2021.07.094>
- Sultana, F. (2021). *Factors Determining Job Stress: A Study on Faculties of Public Universities in Bangladesh*. 10(4), 184–189.
- Trivellas, P., Reklitis, P., & Platis, C. (2013). The Effect of Job Related Stress on Employees' Satisfaction: A Survey in Health Care. *Procedia - Social and Behavioral Sciences*, 73, 718–726. <https://doi.org/10.1016/j.sbspro.2013.02.110>
- Wu, P. L., Tseng, S. M., Tseng, Y. C., Chen, L. C., Pai, H. C., & Yen, W. J. (2021). Job stress and occupational burnout among clinical nursing teachers: A cross-sectional study. *Journal of Professional Nursing*, 37(5), 907–915. <https://doi.org/10.1016/j.profnurs.2021.07.014>