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Effects of Return to Work After the COVID-19 Pandemic

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ABSTRACT

The effect of the COVID-19 pandemic transformed the lives of all people. The vaccination process worldwide, in a way, is creating the necessary conditions to return to face-to-face attendance in daily work activities. In this sense, the research focuses on establishing whether people who are working in person have been affected by their daily activities in their work environment with other colleagues. An online survey was conducted, from which a total of N = 202 participants was taken. Aspects related to efficiency and effectiveness in the workplace, and whether stress affected their performance, were addressed. The results show that the biggest stress for participants is having to share activities with larger groups of people, regardless of whether biosecurity standards are respected.

Keywords: COVID-19, Face-to-face work, Work environment, Stress

INTRODUCTION

The COVID-19 pandemic has generated a globalized crisis (Guadalupe-Lanas, Cruz-Cárdenas, Arias-Flores, 2021), due to the strategies that must be implemented in the organization. These are related to distancing safety measures, health protocols, maintaining communication and collaboration in the work environment, using technologies to develop work and how to involve all members of the organization in this stage of risk (Ahmed et al., 2021; Paramita et al., 2021). This risk extends to the technological, political, natural, social, and economic, which is affecting the efficiency and ability of organizations to stay afloat (Mokline & Ben Abdallah, 2021).

To evaluate the impact of COVID-19 on the functioning of companies, it is necessary to compare it with previous situations, and adapt to the reality of each sector (Gajdzik & Wolniak, 2021). This harmony depends on the adaptability of its employees, therefore, facing challenges through flexible, adaptable, human and interactive systems, maintaining the health, individual

Table 1. Workspace.

			Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Male	Administration	37	38. 1	38. 1	38. 1
		Teaching	54	55. 7	55. 7	93. 8
		Research	6	6. 2	6. 2	100. 0
		Total	97	100.0	100.0	
	Female	Administration	56	53. 3	53. 3	53. 3
		Teaching	44	41. 9	41. 9	95. 2
		Research	5	4. 8	4. 8	100. 0
		Total	105	100.0	100.0	

resilience and commitment of employees, will establish the ability to withstand challenges in the current context of organizations (Taylor et al., 2019). Undoubtedly, workers face problems related to their occupational health, which stem from conflicts between work and family demands, economic factors, exposure to the virus and work-related stress associated with the pandemic that can cause other diseases (Sinclair, Allen, Barber et al., 2020).

In this context, the vaccines developed for the control of the pandemic are somehow creating the necessary conditions to return to face-to-face attendance in daily work activities. In this sense, the objective of the research focuses on establishing whether people who are working in person, have seen their daily activities affected in their work environment with other colleagues; as a hypothesis it is assumed that the female gender is more affected.

RELATED WORKS

The education sector promoted changes based on online educational platforms to continue with its activities. Due to distancing requirements, this sector faces challenges that must be addressed with flexible strategies. 16 challenges and 19 flexible strategies were identified in a study of 200 participants in Bangladesh. In this study, flexible strategies are chosen through a combination of literature results, stakeholder input, Pareto analysis, and the approximate DEMATEL method. It is concluded that it is necessary to adopt and develop new techniques to cope with emerging and dynamic environments, which help maintain the resilience of the education sector and achieve flexibility (Ahmed et al., 2021).

To continue with the processes of student training in universities, the development of a resilient university is considered, since the disturbances generated by various regional or global events have generated instability in the institutions. From the study conducted at the World Maritime University, through a focus group (15 participants) and an online survey (79 participants), they established that the university must develop anticipatory, coping, and adaptive skills, and act on lessons learned (Bartusevičienė & Pazaver, 2021).

Table 2. Stress perception according to work area.

	Workspace			Statistical	Dev. Error
Stress at work	**Teaching**	Mean		18.8061	1.51468
		95% confidence interval for mean	Lower limit	15.7999	
			Upper limit	21.8124	
		Average cut to 5%		17.7800	
		Median		15.5000	
		Variance		224.838	
		Deviation		14.99461	
		Minimal		.00	
		Maximum		60.00	
		Rank		60.00	
		Interquartile range		23.25	
		Asymmetry		.857	.244
		Kurtosis		−.031	.483
	Administration	Mean		11.5806	1.05287
		95% confidence interval for mean	Lower limit	9.4896	
			Upper limit	13.6717	
		Average cut to 5%		10.6631	
		Median		9.0000	
		Variance		103.094	
		Deviation		10.15352	
		Minimal		.00	
		Maximum		50.00	
		Rank		50.00	
		Interquartile range		14.00	
		Asymmetry		1.310	.250
		Kurtosis		2.128	.495
	Research	Mean		16.0909	4.49131
		95% confidence interval for mean	Lower limit	6.0836	
			Upper limit	26.0982	
		Average cut to 5%		15.1010	
		Median		16.0000	
		Variance		221.891	
		Deviation		14.89600	
		Minimal		.00	
		Maximum		50.00	
		Rank		50.00	
		Interquartile range		23.00	
		Asymmetry	1.197		.661
		Kurtosis	1.416		1.279

METHODOLOGY

For the research, a questionnaire with 30 items was designed, which presented a $\alpha = 0.96$. It was socialized and sent to the members of the institution, establishing the confidentiality of the data and the freedom of participation. There were 202 participants, 52.0% represented by women and 48.0% by men. The age range is between 23 and 61 years of age with an average of 40.0, segmented into work areas (administration, teaching, and research), as presented in Table 1.

Table 3. Group statistics.

	Gender	N	Mean	Deviation	Dev. Average error
Stress at work	**Female**	105	15.4476	13.18068	1.28630
	Male	97	15.2062	13.67018	1.38800

Table 4. Testing of independent samples.

		Levene test of equality of variances		T Test for equality of means	
		F	Gis.	t	Gl
Stress at work	**Equal variances are assumed**	.037	.848	.128	200
	Equal variances are not assumed			.128	197.343

Table 5. Testing of independent samples.

		T Test for equality of means		
		Sig. (bilateral)	Average difference	Standard error difference
Stress at work	Equal variances are assumed	.898	.24143	1.88964
	Equal variances are not assumed	.899	.24143	1.89238

RESULTS

When analyzing the work areas and how people are affected according to the contact they have with users, a higher level of stress is perceived in teachers and at a lower level in the administrative area, as presented in Table 2.

Considering the area of work, the administrative staff has the lowest mean (M = 11.5806), compared to the other two areas studied (M = 18.8061 and M = 16.0909) teaching and research, respectively. On the other hand, the area of teachers has the highest mean stress in the areas studied (M = 18.8061). In this context, the greatest variability between the means occurs in the research area (4.4913), this may be due to the fact that this area is very small compared to the other two.

Understanding the data (Table 2), it can be seen that the administration and research area present an asymmetry to the right (1.310, 1.197), while the teaching area presents an asymmetry less than zero, which indicates that a minority of employees consider that they are not affected by the stress in the workplace.

When comparing averages with Student's T of stress according to gender, there is no major difference between men and women, both are equally stressed. The mean hypothesis is not tested because the significance is greater than 0.05, as presented in Table 3.

Considering the Levene statistic, it can be established that the variances are different, since their value is less than 0.05, as presented in Table 4.

The t statistic with its level of bilateral significance informs us that the means are equal, since in our case it is greater than 0.05, as shown in Table 5.

CONCLUSION

The activities, according to the area of work, are affected depending on the work they must do, so the research shows that people who work in the research area are more stressed than people who work in the administrative area. On the other hand, gender is not a factor in which there are significant differences, both men and women are equally stressed in their areas of work.

These results cannot be generalized, because the sample is very small; in the future, a larger study will be carried out.

REFERENCES

Ahmed, S., Taqi, H. M. M., Farabi, Y. I., Sarker, M., Ali, S. M., & Sankaranarayanan, B. (2021). Evaluation of Flexible Strategies to Manage the COVID-19 Pandemic in the Education Sector. Global Journal of Flexible Systems Management,. https://doi.org/10.1007/s40171-021-00267-9

Bartusevičienė, I., Pazaver, A. & Kitada, M. (2021). Building a resilient university: ensuring academic continuity—transition from face-to-face to online in the COVID-19 pandemic. WMU J Marit Affairs 20, 151–172. https://doi.org/10.1007/s13437-021-00239-x

Gajdzik, B., & Wolniak, R. (2021). Influence of the COVID-19 crisis on steel production in poland compared to the financial crisis of 2009 and to boom periods in the market. Resources. https://doi.org/10.3390/resources10010004

Guadalupe-Lanas, J., Cruz-Cárdenas, J., Arias-Flores, H. (2021). The Impact of COVID–19 on Students' Economic Life. In: Kalra, J., Lightner, N.J., Taiar, R. (eds) Advances in Human Factors and Ergonomics in Healthcare and Medical Devices. AHFE 2021. Lecture Notes in Networks and Systems, vol 263. Springer, Cham. https://doi.org/10.1007/978-3-030-80744-3_72

Mokline, B., Ben Abdallah, M.A. (2021). Individual Resilience in the Organization in the Face of Crisis: Study of the Concept in the Context of COVID-19. Glob J Flex Syst Manag 22, 219–231. https://doi.org/10.1007/s40171-021-00273-x

Paramita, W., Rostiani, R., Winahjoe, S. et al. (2021). Explaining the Voluntary Compliance to COVID-19 Measures: An Extrapolation on the Gender Perspective. Glob J Flex Syst Manag 22, 1–18. https://doi.org/10.1007/s40171-021-00261-1

Sinclair, R.R., Allen, T., Barber, L. et al. (2020). Occupational Health Science in the Time of COVID-19: Now more than Ever. Occup Health Sci 4, 1–22. https://doi.org/10.1007/s41542-020-00064-3

Taylor C., Dollard M.F., Clark A., Dormann C., Bakker A.B. (2019). Psychosocial Safety Climate as a Factor in Organisational Resilience: Implications for Worker Psychological Health, Resilience, and Engagement. In: Dollard M., Dormann C., Awang Idris M. (eds) Psychosocial Safety Climate. Springer, Cham. https://doi.org/10.1007/978-3-030-20319-1_8