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Research Paper

What Happens After? - Measuring and Comparing the Organizational Role Stress of Front-Line Professionals Post-Pandemic Period

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ABSTRACT

Post-pandemic many front-line professionals reported psychological burden, fear, anxiety, depression, job burnout, and increased cases of mass resignation also known as "The Great Resignation". Therefore, in order to evaluate the current condition of the front-line organizations, the aim of the study is to measure the level of organizational role stress of various front-line professions including transport and other essential delivery services, medical professionals, bank employees, and engineers. The data was collected post covid in 2023 through snowball sampling using Forms and analyzed using ANOVA and Tukey's honest significance test with the help of SPSS 27v. The results showed that the role ambiguity was significantly different amongst the four front-line professionals and on further analysis it was found that medical professionals have the highest level of role ambiguity.

In 2019, the virus SARS-CoV-2 caused a pandemic of respiratory illness, called COVID-19. The outbreak started in December 2019 in Wuhan, China, and gradually spread to other countries including India. COVID-19 started in India from Kerala when three students returned from Wuhan, China. The WHO (World Health Organization) declared it a national emergency and the Government of India imposed a nationwide lockdown to prevent community transmission of the infection. The lockdown meant the closure of educational and training institutions, hotels and restaurants, malls, cinemas, gyms, sports centers, and places of worship. Most people were in their homes in order to prevent infection from spreading, except the front-line workers. Frontline workers are employees in an organization that provide some essential service to the general public (Cloud, n.d.). Front-line workers couldn't stop working as they had essential jobs and services to provide, and if those services were stopped then the pandemic could have been worse. Front-line workers include various professions such as medical professionals, transportation or delivery professionals, engineers, bank professionals, etc. Ironically, despite helping people, front-line workers faced social stigma. They were forced to leave their neighborhood and denied access to their houses and their families also received threats. The insurmountable difficulties that they underwent to win the war against the virus were downplayed and instead, social stigma

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overpowered the goodwill of those for whom they served (Bhattacharya et al., 2020). Stress and Burnout was a common factor that affected various organizations as the ambiguities and uncertainties were at high levels during COVID-19. Various studies demonstrated that front-line workers like nurses and physicians experienced high levels of stress due to unusual work shifts and extended work hours. In light of such strains, COVID-19 has substantially contributed to a greater risk of employees encountering job burnout – a chronic stress syndrome, including chronic feelings of exhaustion and a distant attitude toward work (Demerouti et al., 2010). Post-COVID times, the phenomenon of Great Resignation took hold. Primarily starting in the USA in 2020, the Great Resignation referred to the voluntary mass resignation of employees from the workforce attributed to the aftermath of the COVID-19 pandemic. Companies had to introduce new rules and work processes, leading to drastic changes in the workplace which affected India as well (Puri, 2023). With slashed salaries, overtime shifts, and the need to work during a pandemic, the employees started feeling exhausted, and since the return efforts were so little, they decided to call it quits on their job (Puri, 2023). Various studies were done during COVID-19 to see its effect, but limited studies were done post-Covid to follow up on the condition of front-line workers. It is important to follow up after mega-disasters such as cOVID-19. For example, studies showed that people who were exposed to Hurricane Katrina had above-baseline stress and depression symptoms a year after the event (Obradovich et al., 2018), highlighting that mental health problems may remain long after a crisis. Post-COVID frontline healthcare workers with increased exposure to COVID diagnosis, treatment and care during the pandemic are especially likely to report psychological burden, fear, anxiety and depression (Newman et al., 2021). In order to follow up on the stress level of front-line workers, it is important to evaluate their organizational role stress. Stress, it is argued, can only be sensibly defined as a perceptual phenomenon arising from a comparison between the demand on the person and his or her ability to cope. An imbalance in demand and the coping ability of the person gives rise to the experience of stress, and to the stress response (T. Cox ,1978). It is the pressure that individuals face when they are unable to learn or understand the relevant rights and obligations related to their work and to perform their roles well or it can be said to be an imbalance status caused by some external factors. There might be a lot of factors causing organizational change such as organizational structure, demand of tasks & roles, quality of work, change in business processes, leadership style etc.

Rationale
It is critical to follow up on the organizational stress level of front-line workers after the psychological, physical, social and economic burden that COVID-19 brought upon them, as its effect can manifest significantly later than the actual catastrophe. The aim of this study is to compare the organizational role stress of front-line workers from four professional areas: transportation professionals, medical professionals, bank employees and engineers. This will help us understand the current stress levels of front-line workers and the domain of organizational role stress that needs intervention and attention. It will also give direction to future research to study what are the organizational factors contributing to employee stress. After assessing the critical factors, appropriate policies and interventions can be applied to the profession in need, in order to adequately deal with post-pandemic-specific and generically uncertain job demands and increased resignations.

Objectives
1. To evaluate the levels of various dimensions contributing to the organizational role stress amongst the front-line professions post covid.

2. To evaluate which dimension of organizational role stress is causing significant stress amongst the front-line professionals.

Hypotheses
1. The front-line professionals have significantly different levels of role stagnation.
2. The front-line professionals have significantly different levels of role overload.
3. The front-line professionals have significantly different levels of role isolation.
4. The front-line professionals have significantly different levels of self-role distance.
5. The front-line professionals have significantly different levels of resource inadequacy.
6. The front-line professionals have significantly different levels of inter-role distance.
7. The front-line professionals have significantly different levels of role expectation conflict.
8. The front-line professionals have significantly different levels of role erosion.
9. The front-line professionals have significantly different levels of role ambiguity.
10. The front-line professionals have significantly different levels of personal inadequacy.

METHODOLOGY

Sample
Sample consisted of 146 front-line professionals (94 males, 52 females) that included 36 Transportation Services Members, 37 Medical Professionals, 36 Bank employees and 37 Engineers. The mean age of the sample was 33.1 years (SD= 17.5, range = 18-78). Three participants (1 from Transportation and other essential services, 1 from Engineers and 1 from medical professionals) were excluded from the analysis of the study because they left the questionnaire incomplete.

Instruments
- *Organizational Role Stress:* The Organizational Role Stress (ORS) Scale used in the present study was developed by Udai Pareek. The instrument has 50 items and 10 dimensions i.e., 5 items per dimension. ORS is a point scale, indicating how true a particular statement is for the role. The dimensions are -
- *Inter-Role Distance (IRD):* Mismatch between the organizational role and other roles outside the organizations.
- *Role Stagnation (RS)*: When there are limited opportunities for growth and the employee feels stagnant.
- *Role Expectations Conflict (REC)*: When there are contradictory demands made on the role by different citizens in the organization.
- *Role Erosion (RE)*: When a human being feels that some important functions which are related to his work are given to someone else to carry out, he/she feels that the job which he is doing is not challenging.
- *Role Overload (RO):* When there is a feeling that too a great deal is expected from the job than what the occupant can cope with.
- *Role Isolation (RI):* When there is a need of a suitable linkage of one's role with the others' role in the organization.
- *Personal Inadequacy (PI):* When there lack of information, skills or adequate preparation to be effective in a particular role.
- *Self-Role Distance (SRD)*: When there is an argument between one's values and self-concepts with the supplies of the organizational role.

- ***Role Ambiguity (RA):*** When a person does not have a clear picture of work objectives, co-workers' expectations and the scope and everyday jobs of his/her job.
- ***Resource Inadequacy (RI):*** When there is non-availability of capital needed for effective role performance

The following table gives the summary view of ORS

Sl. No.	Dimensions of Organizational Role Stress	Item No.
1.	Inter-Role Distance	1,11,21,31,41
2.	Role Stagnation	2,12,22,32,42
3.	Role Expectation Conflict	3,13,23,33,43
4.	Role Erosion	4,14,24,34,44,
5.	Role Overload	5,15,25,35,45
6.	Role Isolation	6,16,26,36,46
7.	Personal Inadequacy	7,17,27,37,47
8.	Self-Role Distance	8,18,28,38,48
9.	Role Ambiguity	9,19,29,39,49
10.	Resource Inadequacy	10,20,30,40,50

The new ORS scale has 50 items. The score of each role stress may range from 0 to 25. Responses are made on a 5-point Likert-scale (0= never or rarely to 4= very frequently or always). Responses are to be given in a separate answer sheet to facilitate quick calculation of role stress score. Comparing the two forms, it might be observed that 26 items have been retained without any change. There is evidence of high internal consistency and high construct validity.

Procedure
Participant recruitment
People from various organizations were contacted through email and asked to forward the mail to their colleagues who were in similar professions. Data was collected using a Google Form that was included in the mail along with informed consent and instructions for each questionnaire.

Data Analysis
The collected data was scored for each of the three scales and all four professions sample data was pooled together and SPSS 27th version and ANOVA was used to create a master chart to determine whether there were any statistically significant differences between the four professional groups of frontline professionals on the dimensions of organizational role stress. After that various groups of front-line workers were compared using Tukey's honest significance test.

RESULTS

Table 1.1 - Comparison of various groups of front-line professionals on the basis of Organizational Role Stress-

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig. Level
Inter-Role Distance	Between Groups	27.576	3	9.192	.449	.719
	Within Groups	2785.417	136	20.481		
	Total	2812.993	139			
Role Stagnation	Between Groups	18.448	3	6.149	.210	.889
	Within Groups	3975.295	136	29.230		
	Total	3993.743	139			
Role Expectation Conflict	Between Groups	21.178	3	7.059	.586	.625
	Within Groups	1638.215	136	12.046		
	Total	1659.393	139			
Role Erosion	Between Groups	44.598	3	14.866	.736	.532
	Within Groups	2746.338	136	20.194		
	Total	2790.936	139			
Role Overload	Between Groups	49.927	3	16.642	1.078	.361
	Within Groups	2099.816	136	15.440		
	Total	2149.743	139			
Role Isolation	Between Groups	58.813	3	19.604	1.304	.276
	Within Groups	2045.158	136	15.038		
	Total	2103.971	139			
Personal Inadequacy	Between Groups	16.465	3	5.488	.469	.704
	Within Groups	1591.506	136	11.702		
	Total	1607.971	139			
Self-Role Distance	Between Groups	11.186	3	3.729	.247	.863
	Within Groups	2053.557	136	15.100		
	Total	2064.743	139			
Role Ambiguity	Between Groups	145.142	3	48.381	3.853	.011
	Within Groups	1707.794	136	12.557		
	Total	1852.936	139			
Resource Inadequacy	Between Groups	13.128	3	4.376	.314	.816
	Within Groups	1898.044	136	13.956		
	Total	1911.171	139			

The following are the results of the study based on statistical technique called Analysis of Variance (ANOVA) using the Statistical Package for the Social Sciences (SPSS):
The result of the comparison between the groups of various professional front-line workers indicated no significant difference at .05 level for the following dimensions - Role Stagnation, Role Overload, Role Isolation, Self-Role Distance, Resource Inadequacy, Inter-Role Distance, Role Expectation Conflict, Role Erosion and Personal Inadequacy. However, in the dimension of Role Ambiguity, from Table 1.1, it is evident that the result of the comparison between the groups of various professional front-line workers indicates a significant difference at .05 level and the probability level (p) which was .011.

Table 1.2 Post HOC comparison of various professions with each other in relation to Role Ambiguity.

Dependent Variable	Frontline workers Groups	Frontline workers Groups	Mean Difference	Std. Error	Sig.
Role Ambiguity	Transport and other essential services	Medical Professionals	-.95079	.84119	.671
		Bank Employees	1.87778	.84119	.120
		Engineers	.27778	.84744	.988
	Medical Professionals	Bank Employees	2.82857*	.84709	.006
		Engineers	1.22857	.85330	.477
	Bank Employees	Engineers	-1.60000	.85330	.244

When the various groups of front-line workers were compared using the Tukey's honest significance test. Following were the results with the significance level set at .05: From Table 1.1 results indicated that different professional groups are significantly different in their Role Ambiguity however, to ascertain the group difference on this dimension Tukey's honest significance test was applied. From the Post HOC comparison in this dimension, it is indicated that Transport and other Essential Services are not significantly different from medical professionals, bank employees and engineers with p-value being .671, .120 and .988 respectively. Medical professionals are also not significantly different from engineers with p-value being .477. However, medical professionals are significantly different from bank employees with the p-value being .006. Lastly, there is no significant difference seen between the Role Ambiguity of bank employees and engineers with the p-value being .244.

DISCUSSION

The present study is aimed at measuring and comparing the various dimensions of Organizational Role Stress (ORS), post covid in four professions representing front-line workers: transport and other essential services, medical professionals, bank employees and engineers. The findings indicated no significant difference at .05 level for Role Stagnation, Role Overload, Role Isolation, Self-Role Distance, Resource Inadequacy, Inter-Role Distance, Role Expectation Conflict, Role Erosion and Personal Inadequacy. However the comparison between the groups of various professional front-line workers indicates a significant difference in their Role Ambiguity level. Role Ambiguity is when a person does not have a clear picture of work objectives, co-workers' expectations and the scope and everyday jobs of his/her job.

On further analysis using Tukey's honest significance test, the result showed that post-Covid, medical professionals have the highest level of Role Ambiguity among the four front-line professionals. In other words, it means that medical professionals have the least sense of a clear picture of work objectives, co-workers' expectations and the scope and everyday jobs of his/her job. The influence of Role Ambiguity on employees has been

described by Lee and Ashforth (1996), as an affective state, which includes anxiety, depression, lack of self-confidence, or dysfunction in dealing with social situations. The influence of Role Ambiguity was seen in various studies done on the mental health condition of frontline medical professionals as indicated in the study by Parthasarathy et al. (2021), which concluded that among the 3083 HCWs (healthcare workers) who completed the survey (response rate-51.4 %), anxiety disorder and depression was highest among those with frontline COVID-19 responsibilities (anxiety disorder-26.6 %, depression-23.8 %)

The finding of our study indicates that even when the pandemic is over, its aftereffects are persisting. There is still high Role Ambiguity present amongst the medical professionals. This is of concern as there are various consequences of role ambiguity in the medical professionals and healthcare industry. Role Ambiguity represents a psychosocial risk factor that influences workers' well-being, diminishing the level of motivation and this process leads to emotional exhaustion (Panari et al., 2019). The role ambiguity spreads and influences other employee's emotions (Hatfield et al., 1993). Thus, the factors maintaining the Role Ambiguity post COVID-19 should be identified and taken into consideration.

CONCLUSION

From this study, it can be concluded that different front-line professions experience different levels of organizational role stress which can be due to the fact that each of the professions has a different nature of work, responsibilities, income, working hours, interactions etc. The comparison between the groups of various professional front-line workers indicated that Role Ambiguity was the only dimension of the Organizational Role Stress (ORS) Scale that was significantly different between the front-line workers. On further analysis using Tukey's honest significance test to ascertain the group difference on the dimension of Role Ambiguity and from the Post HOC comparison in this dimension, it was indicated that medical professionals had the highest Role Ambiguity. Thus, in providing interventions and changes in the workings and schemes of an organization including front-line workers after the pandemic, psychological correlates of organizations like organizational stress should also be taken into consideration in order to reduce resignations and increase job satisfaction. The study had various limitations as well. The first one was that the findings were generated from a small sample size and these findings were generalized to the population of all the professionals. Secondly, due to the lengthiness of the questionnaire many respondents left it incomplete. To mitigate these limitations in the future, we suggest that in addition to quantitative methods, qualitative methods such as diary method should be included, and the sample size should be increased.

REFERENCES

Bhattacharya, P., Banerjee, D., & Rao, T. S. (2020). The "Untold" Side of COVID-19: Social Stigma and Its Consequences in India. *Indian Journal of Psychological Medicine*, *42*(4), 382–386. https://doi.org/10.1177/0253717620935578

Cloud, H. (n.d.). *Who is considered to be a frontline worker? | HR Cloud*. https://www.hrclo ud.com/blog/who-is-considered-to-be-a-frontline-worker

Colman, A. M. (2009). *A Dictionary of Psychology*. Oxford University Press, USA.

Foss, N. J. (2020). The impact of the COVID-19 pandemic on firms' organizational designs. *Journal of Management Studies*, *58*(1), 270–274. https://doi.org/10.1111/j oms.12643

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional contagion. *Current Directions in Psychological Science*, *2*(3), 96–100. https://doi.org/10.1111/1467-8721.ep10770953

Jones, J. C. (1983). Role Stress Scales Role Stress Scales Manual. *Group & Organization Studies*, *8*(3), 357–363. https://doi.org/10.1177/105960118300800311

Kaushik, S., Kaushik, S., Sharma, Y., Kumar, R., & Yadav, J. P. (2020). The Indian perspective of COVID-19 outbreak. *Virusdisease*, *31*(2), 146–153. https://doi.org/10.1007/s13337-020-00587-x

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, *81*(2), 123–133. https://doi.org/10.1037/0021-9010.81.2.123

Miller, D. (2001). The people make the process: commitment to employees, decision making, and performance. *Journal of Management*, *27*(2), 163–189. https://doi.org/10.1016/s0149-2063(00)00094-5

Newman, K., Jeve, Y., & Majumder, P. (2021). Experiences and emotional strain of NHS frontline workers during the peak of the COVID-19 pandemic. *International Journal of Social Psychiatry*, *68*(4), 783–790. https://doi.org/10.1177/00207640211006153

Panari, C., Caricati, L., Pelosi, A., & Rossi, C. (2019). Emotional exhaustion among healthcare professionals: the effects of role ambiguity, work engagement and professional commitment. *PubMed*, *90*(6-S), 60–67. https://doi.org/10.23750/abm.v90i6-s.8481

Pareek, U. (1983) Organizational Role Stress Scale. Manual, Navina Pub., Ahmedabad. - References - Scientific Research Publishing. (n.d.). https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=1815762

Parthasarathy, R., Jaisoorya, T. S., Thennarasu, K., & Murthy, P. (2021). Mental health issues among health care workers during the COVID-19 pandemic – A study from India. *Asian Journal of Psychiatry*, *58*, 102626. https://doi.org/10.1016/j.ajp.2021.102626

Puri, G. (2023). The Great Resignation: The Indian Picture. *Naukri's Official Blog*. https://www.naukri.com/blog/the-great-resignation-the-indian-picture/

S, S. (2019). Organization. *Business Jargons*. https://businessjargons.com/organization.html