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UNLOCKING THE MEDIATING ROLE OF PSYCHOLOGICAL DISTRESS OF COVID-19 IN BETWEEN WORK OVERLOAD DURING COVID-19 AND MENTAL WELL-BEING UNDER THE MODERATING ROLE OF PERCEIVED ORGANIZATIONAL SUPPORT.

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#### **ABSTRACT**

**OBJECTIVE:** To explore the impact of work overload through the psychological distress of COVID-19 on the mental well-being of paramedics under the moderating role of perceived organizational support. METHODS: Paramedics working at public hospitals during the COVID-19 pandemic are selected as the target population to get the response with the help of standardized tools in the form of the questionnaire. **RESULTS:** The control variables were introduced, revealing a modest contribution  $\beta$  = 0.07 to the variance in Mental Well-being. POS exhibited a significant positive relationship  $\beta = .296$ with Mental Well-being, emphasizing the crucial role of organizational support in promoting paramedics' well-being. Conversely, PD demonstrated a negative relationship  $\beta = -.241$  with Mental Well-being, highlighting the adverse impact of psychological distress on paramedics' overall well-being. However, WL did not exhibit a statistically significant relationship with Mental Well-being  $\beta = .089$ , ns. The interaction term between POS and WL showed a substantial positive relationship  $\beta = .745$ , indicating that when organizational support and workload interact positively, it significantly enhances paramedics' Mental Well-being. Conversely, the interaction term between POS and PD revealed a negative relationship  $\beta = -.318$ , emphasizing that a supportive organizational environment can mitigate the negative impact of psychological distress on well-being. CONCLUSION: The finding indicates that work overload during COVID-19 negatively impacted paramedics' mental well-being through the psychological distress of COVID-19. Perceived organizational support has a moderating role in the psychological distress of COVID-19 and mental well-being.

**Key Words:** Work overload, psychological distress, COVID-19, Mental well-being.

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### INTRODUCTION

The onset of the COVID-19 pandemic in 2020 was a historic turning point that presented unparalleled difficulties to global society and enterprises. The current crisis has significantly impacted the healthcare business, with the pandemic placing exceptional demands on this sector. The COVID-19 epidemic has placed significant pressure on healthcare systems and has had far-reaching implications for healthcare personnel's physical and emotional well-being, especially those directly involved in providing treatment <sup>1, 2.</sup>

Paramedics face a distinctive and challenging role as the primary providers of emergency medical care to those with life-threatening illnesses. The significance of their position increased significantly during the epidemic, which resulted in a notable rise in the number of

patients needing immediate medical care. Paramedics, who are familiar with the physical strains inherent in their job, have faced additional obstacles because of the COVID-19 epidemic. These issues include heightened workloads and limited resources, which have significantly affected their overall well-being 3,4. Paramedics experienced job overload, which included two distinct dimensions: quantitative and qualitative. These aspects emerged as key contributors to the stress levels encountered by paramedics. The phenomenon of quantitative pandemic during overwork the characterized by an excessive allocation of tasks and the consequent need to restructure work schedules, leading to both physical and mental fatigue. Qualitative overwork pertains to managing excessive work expectations and the emotional strain associated with confronting difficult circumstances, which may result in

inefficacy and powerlessness 5, 6. The demands highlight the utmost significance of sustaining ideal circumstances for a salubrious working milieu within the healthcare industry. The efficacy and operational performance of healthcare facilities are significantly contingent upon the welfare of their personnel. However, the insufficiency of resources, such as personal protective equipment PPE, the inappropriate usage of PPE, and the practice of recycling single-use equipment, have increased the vulnerability of healthcare personnel to elevated hazards 7. This study paper addresses a notable research void within the framework of the prevailing work environment. The existing body of research has extensively examined the effects of psychological distress on the mental wellbeing of healthcare professionals. However, there is a significant gap in knowledge regarding the association between work overload during the COVID-19 pandemic and mental well-being, specifically among paramedics. This gap is particularly notable in terms of understanding how psychological distress mediates this relationship 8.

The literature suggests that there is a negative association between psychological distress and mental well-being. Additionally, previous studies have found that perceived organizational support plays a moderating role in the relationship between work overload and mental well-being 9. Nevertheless, the precise intermediary function of psychological distress in the correlation between job pressure during the COVID-19 pandemic and mental well-being has yet to be investigated, particularly in the context of paramedics.

Hence, the present study aimed to address significant research inquiries: What is the influence of job overload within the COVID-19 pandemic on individuals' mental well-being? What is the correlation between job overload and psychological distress? Is there a mediation role of psychological discomfort in the relationship between job overload and mental well-being? Is there a mediating role of perceived organizational support in the relationship between job overload and mental well-being?. The aim of this research was to explore the complex correlation between mental well-being and job overload within the COVID-19 pandemic, with a particular focus on exploring the potential mediating influence of psychological discomfort.

# METHOD AND MATERIALS

The present study used a cross-sectional research methodology to examine the associations between work overload experienced by paramedics during the COVID-19 pandemic, psychological discomfort, perceived organizational support, and mental well-being. The chosen study strategy enabled the gathering of data at a singular moment, enabling an analysis of these factors within the context of the pandemic.

The research used a convenience sampling method to recruit paramedics employed within

the healthcare industry. The recruitment of participants was conducted through an online survey link, with their participation in the research being completely optional. To ascertain the sample's relevance, paramedics from a range of healthcare settings were addressed, therefore including the diverse array of experiences within the paramedical profession.

A non-probabilistic sampling method was used, specifically using a handy sampling strategy. The utilization of this methodology facilitated the identification of individuals to partake in the study, taking into consideration their ease of access and desire to engage, considering the distinctive obstacles and requirements encountered within the paramedical field during the COVID-19 crisis. The researchers used the snowball sampling method, which allowed participants to recommend additional persons who had comparable features and were deemed appropriate for inclusion in the study.

The data were obtained using an online survey platform, which offered participants a safe and simple method for completing the surveys. Prior to completing the surveys, participants were given explicit instructions and a concise overview of the study's aims and protocols. The preservation of participants' identity and confidentiality was rigorously maintained for the whole of the data-gathering procedure.

The data that was gathered was analyzed using suitable statistical techniques to investigate the correlations between job overload, psychological discomfort, perceived organizational support, and mental well-being among paramedics. The researchers calculated descriptive statistics, including means and standard deviations, for variable. Additional analyses performed to investigate the study topics and hypotheses, including correlation analyses, regression analyses, and mediation/moderation studies. The research gained ethical clearance from the appropriate institutional review board. All participants provided informed permission, and they were given assurances about the confidentiality and anonymity of their comments. The participants were duly notified that their involvement in the research was completely voluntary, and they had the right to resign from the study at any given time without facing any negative repercussions.

# **RESULTS**

Within the sample of 51 participants, a gender distribution was observed, with 33 people 64.7% self-identifying as male and 18 persons 35.3% self-identifying as female. The participants were classified into several age groups based on their age. Specifically, 19 participants 37.3% were between the ages of 20 and 25, 20 participants 39.2% were in the 26-30 age range, 8 participants 15.7% were aged 31-35, and 4 people 7.8% were over the age of 36. In terms of participants' educational background, significant majority of 41 persons 80.4% had a bachelor's degree, whilst 10 participants 19.6% had obtained a master's degree. In relation to professional experience, it was found that 17

participants 33.3% had reported one year of experience, while 21 participants 41.2% had two years of experience. Additionally, 6 participants 11.8% indicated having three years of experience, and 7 participants 13.7% claimed to have more than three years of professional

experience. The inclusion of demographic information in this study offers useful insights on the makeup of the participant pool, hence enhancing our knowledge of the sample characteristics within the research setting.

Table 3.1: The demographics provide a comprehensive summary of the characteristics of the participants.

Parameter	Detail	Frequency	Percentages
Gender	Male	33	64.7%
	Female	18	35.3%
Age	20-25 Years	19	37.3%
	26-30 Years	20	39.2%
	31-35 Years	8	15.7%
	Above 36 Years	4	7.8%
Education	Bachelor	41	80.4%
	Masters	10	19.6%
Experience	1 Year	17	33.3%
	2 Years	21	41.2%
	3 Years	6	11.8%
	Above 3 Years	7	13.7%

The primary demographic variables, including gender, age, education level, and years of professional experience were included. These variables are regarded as independent factors, while mental well-being is regarded as the dependent variable. The statistical analysis shown in Table 3.2 demonstrates that there is no statistically significant association between any of the demographic characteristics and the mental well-being of the participants. In relation to gender, the F-statistic yields a value of 1.331, accompanied by a p-value of .254, suggesting that gender does not have a statistically significant influence on mental well-being. In a similar vein, the statistical analysis reveals that age does not exhibit a significant predictive

relationship with mental well-being in the examined sample, as shown by an F-statistic of .491 and a p-value of .690. In addition, the impact of education level on mental well-being was examined using an F-statistic of 1.130 and a p-value of .293. The results indicate that there is no statistically significant association between education level and mental well-being. In conclusion, the F-statistic for the variable representing years of professional experience is calculated to be 1.360, accompanied by a pvalue of .267. This finding suggests that there is significant impact of the length of professional experience on the mental wellbeing of the paramedic participants included in the research.

Table 3.2: Correlational analysis of the participants demographic details

Demographic	Mental Well Being	
	F statistics	p-value
Gender	1.331	0.254
Age	0.491	0.690
Education	1.130	0.293
Experience	1.36	0.267

The Mean column displays the mean score achieved for each variable within the sample population. As an example, the average stated workload level among the participants is represented by the mean Workload WL score of 52.3191. Cronbach's Alpha is a statistical measure used to assess the internal consistency and reliability of a variable. The measure assesses the extent to which the components of a variable exhibit a strong association. Greater internal consistency is indicated by higher values of Cronbach's Alpha. The research reveals that the Workload WL variable has a Cronbach's Alpha coefficient of .894, which

suggests a substantial degree of reliability. The construct of Mental Well-being MW has a high level of reliability, as shown by a Cronbach's Alpha coefficient of .947. Psychological Distress PD has a high degree of dependability, as shown by a Cronbach's Alpha coefficient of .930. Nevertheless, the dependability of Perceived Organizational Support POS is significantly diminished, as shown by a Cronbach's Alpha coefficient of .600. The results obtained from this examination of dependability are crucial for comprehending the internal coherence and reliability of the variables used in the research. Variables that exhibit high Cronbach's Alpha

values, such as Mental Well-being MW and Psychological Distress PD, may be regarded as dependable and internally coherent indicators. However, it is important to acknowledge that the dependability level of Perceived Organizational Support POS is somewhat lower in the context Table 3.3: Reliability Analysis of Study Variables

of this research. The obtained findings provide assurance that the data gathered for each variable is reliable and consistent, hence enabling rigorous statistical analysis and the derivation of significant conclusions in the study.

Variable name	Mean	Cronbach's Alpha
Workload WL	52.32	0.894
Mental Well Being MW	49.55	0.947
Psychological Distress PD	26.40	0.930
Perceived Organizational Support POS	25.54	0.600

The findings of a correlation analysis examining the associations between the research variables, namely Workload WL, Mental Well-being MW, Psychological Distress PD, and Perceived Organizational Support POS. The correlation coefficients shown in the table provide a measure of the magnitude and direction of the associations between pairs of variables. A correlation value of 1 denotes a complete positive association, while -1 shows a complete negative association, and 0 symbolizes the absence of any association. The variable representing workload demonstrates a correlation coefficient of 1 with itself, as anticipated, indicating a complete positive connection. The obtained correlation value of .089 indicates a positive although modest relationship between Workload WL and Mental Well-being MW. In essence, there is a tendency for mental well-being to exhibit a little positive shift in response to an increase in effort. The variable representing workload WL exhibits a somewhat greater positive correlation of .211 with Psychological Distress PD, suggesting that an augmented workload is linked to a considerably more pronounced positive alteration in psychological distress. The correlation coefficient between Workload WL and Perceived Organizational Support POS is

0.047, suggesting a negligible positive link. This finding indicates the presence of a limited positive correlation between workload and perceived organizational support. There exists a negative correlation of -.211 between Mental Well-being MW and Psychological Distress PD, suggesting that as mental well-being grows, psychological distress tends to decrease, and conversely, as mental well-being decreases, psychological distress tends to increase. There is a moderate positive link between Mental Well-being MW and Perceived Organizational Support POS, as shown by a correlation coefficient of .162. The relationship between Psychological Distress PD and Perceived Organizational Support POS demonstrates a statistically significant positive correlation of .375\*\*, indicating the significance of organizational support in connection to psychological distress. The correlation coefficients provide valuable insights into the interrelationships among the variables under investigation. The presence of organizational support has a substantial impact on reducing psychological discomfort, but the relationships between workload and mental well-being have less pronounced links. The results provide insight into the interaction between these factors within the specific study setting.

Table 3.4: Correlational Analysis of the participants wellbeing

Variable name	WL	MW	PD	POS
Workload WL	1			
Mental Well Being MW	0.089	1		
Psychological Distress PD	0.211	-0.211	1	
Perceived Organizational Support POS	0.047	0.162	0.375	1

The first stage involves the introduction of control variables into the regression model. The coefficient  $\beta$  associated with the Control Variables is 0.07, indicating their impact on the variation seen in Mental Well-being. Proceeding to the subsequent stage, the model incorporates the main variables, namely Perceived Organizational Support POS, Psychological Distress PD, and Workload WL.

The coefficient for the variable POS is 0.296, suggesting a positive correlation with Mental Well-being. In contrast, the  $\beta$  coefficient for PD is found to be -.241, indicating a negative association with Mental Well-being. Nevertheless, the  $\beta$  coefficient for WL is 0.089 ns, indicating that the observed association lacks statistical significance. The observed increase in the coefficient of determination  $\Delta R^2$ 

for this step is 0.008, indicating that it accounts for about 0.8% of the variability in Mental Well-being. In the concluding phase, interaction terms are included into the analysis to evaluate the collective impact of predictor factors on Mental Well-being. The coefficient of the interaction term POSWL is  $\beta=.745,$  indicating a robust positive association between the interaction of Perceived Organizational Support POS and Workload WL and Mental Well-being. In a similar vein, the coefficient  $\beta$  for the interaction term POSPD is -.318, suggesting a negative association between the combined effect of Perceived Organizational Support POS

and Psychological Distress PD on Mental Wellbeing. In general, the R<sup>2</sup> value in this model signifies the extent to which the included variables account for the variability seen in Well-being. The  $\Delta R^2$ Mental corresponding to each phase of the analysis serve to emphasize the incremental amount of variation accounted for by the variables entered at that stage. The findings of this study provide significant contributions to our understanding of the relationship between several variables, such as organizational support, psychological distress, and workload, in predicting Mental Well-being.

Table 3.5: The findings of a regression analysis examining the factors influencing Mental Well-being

Predictors	Mental Well Being		
	β	$\mathbb{R}^2$	$\Delta R^2$
Step 1			
Control Variables		0.07	
Step 2			
POS	.296		
PD	241		
WL	.089ns	.008	.008
Step 3			
POS*WL	.745		
POS*PD	318	.140	.002

#### **DISCUSSION**

This research highlights the substantial impact of the COVID-19 pandemic on the psychological well-being of workers in the fashion retail industry and its notable contribution to the development of burnout syndrome. The persistent global health crisis has engendered a prevailing feeling of unease, fostering pessimistic perceptions about employment stability, and cultivating a climate of ambiguity among workers <sup>10</sup>. The aforementioned factors, in conjunction with significant modifications to daily work schedules, concerns over physical health, and changes in the work setting, have resulted in heightened levels of mental strain. Significantly, there is a correlation between these increased levels of mental effort and the manifestation of burnout syndrome.

The results of our study suggest that the participants had a moderate degree of mental burden. However, these findings also suggest that there is a potential danger of developing severe burnout syndrome. The findings have significant theoretical and practical ramifications. The authors emphasize the negative consequences of the COVID-19 epidemic on the psychological well-being of workers in the fashion retail industry 11. Furthermore, our research uncovered significant disparities in the components of mental workload across various occupational roles. Individuals occupying higher positions of authority, such as store managers, area managers, and heads of sales, encountered increased cognitive requirements, with area managers being subjected to the most significant level of exposure 12. On the other hand, store managers and area managers faced increased performance

expectations. Moreover, significant disparities were seen in the components of burnout across different occupational roles. Sales assistants, in comparison to store and area managers, had significantly lower levels of personal satisfaction within the hierarchical structure. Although there is a dearth of comparative studies that distinguish across employment roles in the fashion retail industry, our results provide a foundation for future study in this domain, especially in the unique setting of the ongoing epidemic <sup>13</sup>.

The present research additionally examined gender-specific experiences, finding that women had elevated levels of emotional burnout during the pandemic. This may be attributed to heightened financial ramifications and a greater vulnerability to conflicts between work and home roles <sup>14</sup>. Furthermore, it was shown that women had a greater impact of the emotional aspect of workload. The findings of this study are consistent with the current body of research and indicate the need for more investigation. It is noteworthy that despite the extensive research conducted on the mental burden experienced by healthcare professionals during the pandemic, there is a dearth of investigation on the genderrelated differences in mental workload 15. This stands in opposition to the results of our research, which suggest that male individuals employed in the fashion retail industry encountered elevated levels of cognitive and performance aspects of mental strain 16. Therefore, we propose doing further research on gender discrepancies in mental workload within the fashion retailing industry to clarify the contrasts between our study and the current body of literature focused on healthcare professionals 17. Moreover, our

study is in accordance with existing literature on healthcare professionals, indicating that the COVID-19 pandemic has a direct influence on cognitive, emotional, performance, and temporal requirements, as well as the prevalence of burnout syndrome among employees who have close interactions with individuals 16. In accordance with previous research, the presence of somatic symptoms and sleeplessness has been shown to be indicative of burnout 18. Nevertheless. many factors environmental changes, excessive workload, uncertainty, and unfavorable job expectations have been identified as potential predictors of increased mental burden <sup>17, 18.</sup> The conclusion has substantial theoretical significance, as it underscores the notion that the COVID-19 pandemic-induced uncertainties pertaining to job security and prospects might serve as predicting elements for both burnout and mental stress.In the context of the healthcare industry, empirical evidence suggests that healthcare personnel who were not provided with daily information about the COVID-19 pandemic were more susceptible to psychological distress compared to their counterparts who got regular updates. Frequent updates have been shown to promote trust in infection control methods, which may lead to a reduction in the overall perception of danger and thus reduced levels of discomfort. This suggests that healthcare professionals may get advantages from continuous access to information pertaining to COVID-19, as well as engaging in proactive measures to enhance readiness for any future pandemics 19. Furthermore, it was observed that persons who experienced stigmatization and rejection in relation to their employment in hospitals had a higher likelihood of encountering psychological discomfort. This finding aligns with other research that has emphasized the substantial influence of perceived stigma and rejection in predicting psychological distress.

Based on an examination of data collected from first responders during the summer of 2020, our research offers an overall positive assessment about levels of psychological distress in comparison to comparable cohorts. Nevertheless, it is crucial to contextualize this evaluation within a population that has already seen substantial declines in psychological wellbeing 20. While it is conceivable that levels of worry persist at heightened levels in all demographic categories compared to the period before to the pandemic, it is noteworthy to observe that healthcare professionals affiliated with the National Health Service NHS reported comparatively lower levels of anxiety in comparison to other groups of essential employees and the general populace. Fire and rescue service personnel, in addition to the police force, demonstrated notably reduced levels of distress. The results of this study indicate that there is a heightened degree of psychological well-being seen among these populations <sup>21.</sup> This may be attributed to their distinct circumstances or their inherent resilience in terms of mental health.

In conclusion, recent studies pertaining to perceived organizational support POS have shown a clear causal association with turnover intention. The study revealed that increased feelings of support from the organization were associated with a decrease in the desire to leave. of Moreover. the concept organizational support POS has been shown to be linked to a decrease in work-family conflict and job burnout 2<sup>2</sup>. The role of POS Perceived Organizational Support is crucial in reducing voluntary turnover among workers promoting their proactive intention to remain in their current positions within the firm. The development of trust within the context of social exchange theory can deter workers from actively pursuing alternative jobs, since they see human resource management methods in a good light. Perceived organizational support is derived from the theoretical foundations of social exchange and the norm of reciprocity. Within this framework, workers engage in a reciprocal relationship with their company, exchanging valuable organizational results for the perception that their contributions are esteemed, and their well-being is prioritized. As a result, persons who possess a heightened feeling of perceived organizational support POS have a decreased inclination to engage in job exploration or consider the possibility of departing from the business. The study's results may be limited in their generalizability due to the use of very small sample sizes and a mostly male representation among the respondents. To augment the generalizability of the findings, it is recommended that forthcoming investigations make longitudinal inquiries encompassing bigger and more heterogeneous cohorts while also assuring equitable representation of both genders throughout various regions of the nation. Future furthermore examine the inquiries may encounters of individuals affected by COVID-19 and those unaffected in a cross-national setting, considering disparities in socioeconomic circumstances, healthcare infrastructures, immunological reactions, physical well-being, cultural norms, and climatic variables.

# **CONCLUSION**

Conclusively the study examined the negative impact of COVID-19 on the social well-being of paramedical staff. The study elaborated on how perceived organizational support can enhance the favorable work outcomes associated with psychological distress, by fostering intrinsic motivation among individuals. Additionally, this study presents a new perspective by examining the moderating influence of perceived organizational support, a factor that has not been investigated in prior research on the relationship between emotional intelligence and turnover intention.

ETHICS APPROVAL: The ERC gave ethical review approval. CONSENT TO PARTICIPATE: written and verbal consent was taken from subjects and next of kin. FUNDING: The work was not financially

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