

# Counterproductive Work Behaviors In Healthcare Workers: Uncovering The Role Of Perceived Injustice

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## ABSTRACT

**Purpose:** This study examines the relationship of work overload, job stress and the moderating role of perceived injustice, resulting in counterproductive work behavior of healthcare workers in the public sector hospitals of Pakistan, analysed through the lens of equity theory, which states, “Employee motivation at work is driven largely by their<sup>1</sup> sense of fairness.”

**Methodology and Design:** The middle level employees of public sector hospitals of Pakistan were targeted through purposive sampling technique and questionnaires were applied to collect data. Analysis was done through statistical software, SPSS & Smart PLS.

**Findings:** The result of the analysis showed that work overload and job stress adversely affect the behavior of healthcare workers towards work under the moderation of perceived injustice.

**Novelty:** An in-depth analysis of the root causes and their interplay, i.e., work overload, causing job stress and the moderating effect of perceived injustice, all leading to employee counterproductive work behaviors among healthcare workers provides an insight to the reader for better understanding of the relationship of these variables with the outcome of interest.

**Implications:** This research study provides policy guidelines for the policy makers and human resource managers of public sector hospitals to maintain equity among the healthcare workers in order to create a stress-free work environment resulting in positive work behavior of the employees, which ultimately benefits the patients and contributes towards a healthier population.

**Keywords:** Perceived Injustice, Work Overload, Job Stress, Counterproductive Work Behavior.

## Introduction

This research study aims to explore the reasons behind the counterproductive work behavior of healthcare workers serving in the public sector hospitals of the Punjab, Pakistan. The healthcare

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worker, in general, has a very important role to play in the society because the health of the community and thus the whole society depends upon the care they provide to the patient and of course, the attitude with which they provide care, which can be better in a stress-free work environment.

In any organization, counterproductive work behaviors (CWBs) can have detrimental effects on productivity, employee commitment, and ultimately, the success of the organization itself (Fox et al., 2001). Under the umbrella of CWBs are included a range of negative behaviors aimed at harming the organization, including theft, sabotage, aggression, and workplace bullying. These behaviors violate ethical and moral norms and can lead to serious consequences if not addressed (Zaghini et al., 2016). Healthcare workers, particularly nurses, face unique challenges that make them more susceptible to stressful situations (Zaghini et al., 2016). The demanding nature of their work, coupled with increasing workloads, can take a toll on their well-being. Continuous exposure to such stressful environments can potentially contribute to the emergence of CWBs among healthcare workers. One significant factor that has been consistently linked to CWBs is perceived organizational injustice (Berry et al., 2007; Cohen-Charash & Spector, 2001; Colquitt et al., 2001). Individuals may engage in counterproductive behaviors as a means to restore a sense of equity or fairness in response to perceived injustice (Greenberg, 1990).

In the healthcare sector of Punjab, Pakistan, there is a need for comprehensive research to shed light on the factors contributing to CWBs among healthcare workers, with a particular focus on the moderating effect of perceived injustice (El Akremi et al., 2010; Khan et al., 2013).

This study aims to answer the following research questions:

- a) How does role overload contribute to job stress among healthcare workers?
- b) What is the impact of perceived injustice on healthcare worker behavior?

Counterproductive work behaviors pose a significant challenge in healthcare organizations, as they not only affect employee performance but also have direct implications for patient care and safety (Zaghini et al., 2016). As healthcare services play a crucial role in the overall health of a community, it is vital to create a safe and stress-free environment for healthcare workers to ensure they can deliver high-quality care.

To transform and improve employee performance in healthcare organizations, it is crucial to address the issue of CWBs head-on (Krijghsheld et al., 2022). By understanding the role of factors like role overload, perceived injustice, and job stress in contributing to counterproductive behaviors, policymakers and stakeholders can develop strategies to foster a more equitable work environment for healthcare workers, ultimately benefiting both the employees and the patients they serve. In conclusion, counterproductive work behaviors have significant implications for healthcare organizations, employees, and patients. The role of perceived injustice in contributing to CWBs among healthcare workers needs further exploration. By gaining a deeper understanding of the underlying factors, we can develop effective interventions and policies to create a healthier and more productive work environment for healthcare professionals.

## Review of Literature

**Relationship between Role Overload and CWB:** Counterproductive work behaviors (CWBs) refer to actions taken by employees with the intention of harming the organization and its stakeholders (Spector & Fox, 2005). According to the Stressor-Emotion Model, when employees encounter frustrating or stressful situations at work, they develop negative emotions and eventually engage in anti-social behaviors. Thiagarajan et al. (2006) defined work overload as the perception of an individual who lacks the time and capacity to meet incompatible role expectations. Greenglass et al. (2003) further explained that qualitative overload is when employees feel overwhelmed with too many tasks within a specified timeframe. It is important

to note that overload contributes to organizational injustice, leading to negative outcomes for employees, including counterproductive work behaviors (Ezeh & Etodike, 2017). In essence, overloading employees can be detrimental to the organization as it may result in negative retaliation from employees who feel exploited (Nnaebue, 2020).

H<sub>1</sub>: Role overload is positively related to CWB

**Relationship between Role Overload and Job Stress:** Role overload occurs when individuals are faced with high demands of roles, obligations, or tasks within a specific timeframe, surpassing their capacity to perform (Rizzo et al., 1970; Cooper et al., 2001). Task completion within a limited timeframe is the defining characteristic of role overload, as described by Bacharach et al. (1990). Parker and DeCotiis (1983) identified job stress as the perception of personal incapacity caused by events in the work environment. Job stress can be understood as a stimulus and reaction, as well as an interaction between individuals and their environment. McGrath (1982) defined job stress as a condition in which an employee is compelled to fulfill duties beyond their ability or the availability of sufficient resources, resulting in a significant difference between rewards and the demand to fulfill those duties. This research highlights that role overload is highly influential in causing job stress.

H<sub>2</sub>: Role overload is positively related to job stress

**Relationship between Job Stress and Counterproductive Work Behaviors:** According to the Stressor-Emotion Model of CWB proposed by Spector and Fox in 2005, job stressors trigger negative emotions in certain employees, leading to retaliatory counterproductive work behaviors. Krischer et al. (2010) found that perceived injustice within the organization contributes to stress, ultimately resulting in counterproductive work behaviors.

H<sub>3</sub>: Job stress is positively related to CWB.

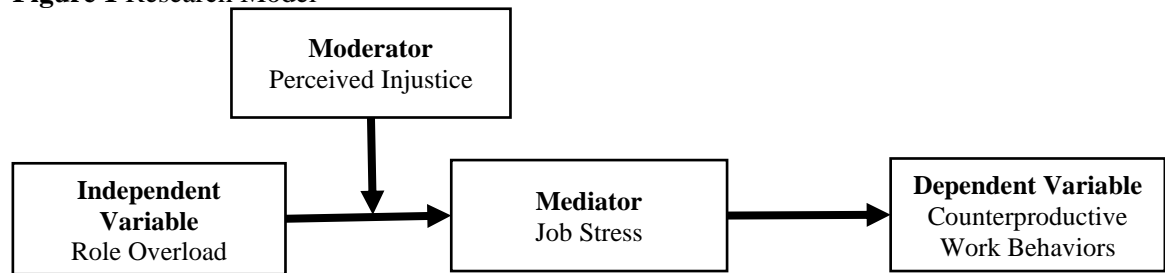
**The moderating role of perceived injustice strengthening the relationship between Role Overload and Job Stress:** Perceived organizational justice, as defined by Cropanzano et al. (2007), refers to the extent to which individuals believe they are treated fairly within the organization, both in terms of outcomes received and the manner of treatment aligning with moral and ethical standards. In public sector hospitals in Punjab, Pakistan, it has been observed that when healthcare workers are over-burdened beyond their job description or capacity, they perceive it as an injustice from the management. This perception of injustice leads to increased job stress. Building upon the Transactional Model of Stress (Lazarus, 1991; Lazarus & Folkman, 1984) and the affective events theory (Weiss & Cropanzano, 1996), it is argued that perceptions of injustice can intensify the negative effects of job stress on employee behaviors.

H<sub>4</sub>: Perceived injustice strengthens the relationship between role overload and job stress.

**The mediating role of Job Stress between Role Overload and Counterproductive Work Behaviors:** Role overload leads to job stress. When healthcare workers continuously experience work overload, their stress levels rise, resulting in deviant work behaviors as their reaction. Extensive research has been conducted to uncover the external and internal factors contributing to CWB. Externally, it has been suggested that stressful events and conditions at work (job stressors) can elicit negative emotions and behaviors in employees (Spector & Jex, 1998), and the perception of workplace stressors can lead to engaging in CWB (Cullen & Sackett, 2003).

H<sub>5</sub>: Job stress mediates the relationship between role overload and CWB, whereby an increase in role overload leads to an increase in counterproductive work behaviors among healthcare workers over time through the mediating effect of job stress.

The research model has been presented in Figure 1

**Figure 1** Research Model**Research Methodology**

This research study has been following deductive approach, quantitative method and positivism research philosophy.

**Research Design:** This research study takes the consent of the reporting head of the respondents from the healthcare sector in order to fill the required questionnaires. The respondent's confidentiality voluntary participation and anonymity have been ensured to take unbiased opinion in the questionnaire.

**Population:** This research study selects the middle-level employees of hospitals (healthcare workers) of public sector in the Punjab as population wherein the data was collected from the major hospitals across reputed cities of Punjab, Pakistan.

**Sampling:** It is the true reflection of the population by following the appropriate type and technique, therefore, non-probability sampling type and purposive sampling technique have been opted to fill the questionnaire from the respondents.

**Pilot Study:** This study has executed pilot data collection for obtaining a decent understanding of the research study (50 respondents).

**Measuring Instrument:** 1) **Role Overload:** This independent variable questionnaire has been developed by Bacharach et al. (1990), which has been adopted and adapted in this research study wherein sample item is "I don't have time to finish my job." 2) **Perceived Injustice:** This moderator questionnaire has been developed by Hodson et al. (1994), which has been adopted and adapted in this research study wherein sample item is "Some people at my workplace receive special treatment because they are friendly with supervisors." 3) **Job Stress:** This mediator questionnaire has been developed by Kahn et al. (1964), which has been adopted and adapted in this research study wherein sample item is "How frequently do you feel bothered by each of these?" 4) **Counter-productive Work Behaviors:** This dependent variable questionnaire has been developed by Fox, S., & Spector, P. E. (1999), which has been adopted and adapted in this research study wherein, the sample item is "Daydreamed rather than did your work."

**Data Analysis and Results**

Data was collected from 50 respondents and the following analyses were performed, using SPSS and Smart PLS software.

**Demographic Frequencies:** Data was collected from both male and female employees. 50% of respondents were males and 50% were females. 38% of respondents were in the age range of 20 to 30 years, 28% were between ages 31 and 40 years and 34 % were 41 and above. 78%

respondents were married and 22% were single. 40% of respondents had work experience of 1 to 5 years, 16% had an experience from 6 to 10 years, 42 % had an experience of 11 or more years reported in Table 1.

**Control Variables:** One-way ANOVA was performed to control the variation in counterproductive work behaviors on the basis of demographic variables used in the study. The results of the test showed that out of all the demographic variables, only age had a significant effect in change in counterproductive work behaviors reported in Table 2. All the rest of the demographic variables had no effect on the dependent variable. Also, all the demographic variables had no effect on the mediator as well, which is job stress.

**Table 1** Demographic Characteristics employees (n=50)

Variables	f	%
Gender		
Male	25	50.0
Female	25	50.0
Age		
20-30 years	19	38.0
31-40 years	14	28.0
41 and above	17	34.0
Marital Status		
Married	39	78.0
Single	11	22.0
Experience		
1-5 Years	20	40.0
6-10 Years	8	16.0
11 or more Years	21	42.0
Nil	1	2.0

f=Frequency, %= Percentage

**Table 2** Control Variables

Demographics	Employee Performance	
	F statistics	P value
Gender	0.85	0.36
Age	3.28	0.04
Marital Status	1.15	0.28
Experience	1.53	0.21

**Reliability Analysis:** Reliability analysis was performed to find out the Cronbach's Alpha values for all items in every questionnaire. The variables, role overload, perceived injustice and job-related tension index had Cronbach's alpha values of 0.7 and more, whereas, the variable, role overload had Cronbach's alpha value of 0.4, which is a moderate value of Cronbach's alpha reported in Table 3.

**Correlation Analysis:** Correlation is a statistical measure that indicates the extent to which two or more variables move together. A positive correlation indicates that the variables increase or decrease together. A negative correlation indicates that if one variable increases, the other decreases, and vice versa. The Pearson correlation coefficient (r) is the most common way of measuring a linear correlation. It is a number between -1 and 1 that measures the strength and direction of the relationship between two variables. When one variable changes, the other

variable changes in the same direction. If you see Table 4, all variables are positively correlated with one another. However, significant positive correlation exists between the variables, job stress and role overload, job stress and perceived injustice and counterproductive work behavior and job stress.

**Table 3** Reliability Analysis

Variable Name	Mean	Cronbach's Alpha
RO	2.80	0.48
PI	3.12	0.72
JRTI	2.37	0.86
CWB	1.93	0.92

RO = Role Overload, PI = Perceived Injustice, JRTI = Job Related Tension Index, CWB = Counterproductive Work Behaviours.

**Table 4** Correlation analysis

	1	2	3	4
1 mRO	1			
2 mPI	.16	1		
3 mJRTI	.28*	.35*	1	
4 mCWB	.25	.23	.42**	1

RO = Role Overload, PI = Perceived Injustice, JRTI = Job-related Tension Index, CWB = Counterproductive Work Behaviours

\*. Correlation is significant at the 0.05 level (2-tailed). \*\*. Correlation is significant at the 0.01 level (2-tailed).

**Moderated Regression Analysis:** Multiple regression analysis was done to test the main effects as well as the moderation effects of variables. The results obtained during the analysis are presented through Table 5. The results indicate that role overload has a positive effect on job stress but p value is non-significant ( $B = 0.23$ ,  $p = ns$ ). This analysis further shows that the value of B for the interaction term between role overload and perceived injustice is  $-0.03$  and p value is non-significant. Figure 2 shows the interaction plot of moderation. It is evident from the graph that with the increase in the intensity of role overload (independent variable), the values for the moderator (perceived injustice) and job stress (dependent variable) have also increased.

**Mediation Analysis:** Mediation analysis was performed by using Hayes Process Macro reported in Table 6, which indicated the following results; the relationship between role overload and counterproductive work behavior is positive but non-significant ( $B = 0.31$ ,  $p = 0.06$ ). The analysis also shows that the relationship between role overload and job stress is positive as well as significant ( $B = 0.28$ ,  $p = 0.04$ ). However, the mediating effect of job stress between role overload and counterproductive work behaviors was indicated to be insignificant ( $B = 0.18$ ,  $p = 0.27$ , LLCI =  $-0.00$ , ULCI =  $0.38$ ). Bootstrap results also reported in Table 7.

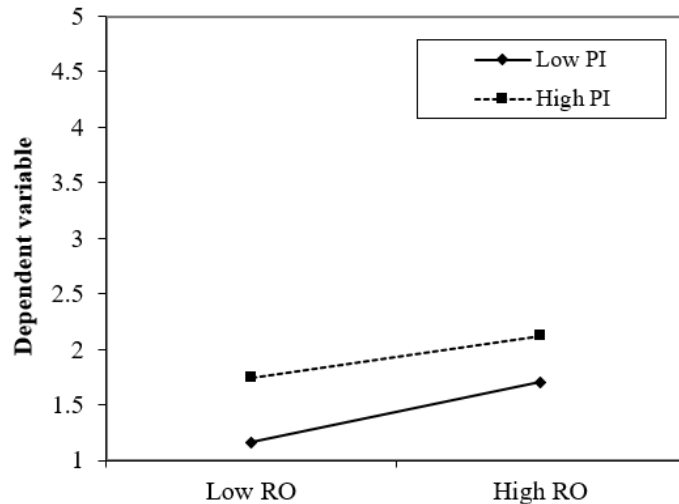
**Table 5** Regression Analysis

Predictors	B	Job Stress	
		R squared	Change in R <sup>2</sup>
Step 1			
Control Variables		0.00	
Step 2			
RO	0.23		
PI	0.25*	0.17	0.17
Step 3			

RO*PI	-0.03	0.17	0.00
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\* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001, ns = non-significant

**Figure 2** Interaction Plot (Moderation Graph)



**Confirmatory Factor Analysis, using Smart PLS:** CFA is a technique used to assess the efficacy of measurement models. Measurement model includes the quality of constructs, including reliability and validity. Factor loading shows how well the items represent the underlying construct. Normally, factor loading should be below 0.6. Measurement model also analyses the reliability and validity of the items. Structural model reports the inter-relationships between the variables. CFA of this study shows that the values of Cronbach’s alpha for most items is close to or greater than 0.7, depicting considerable reliability reported in Figure 3 and Table 8.

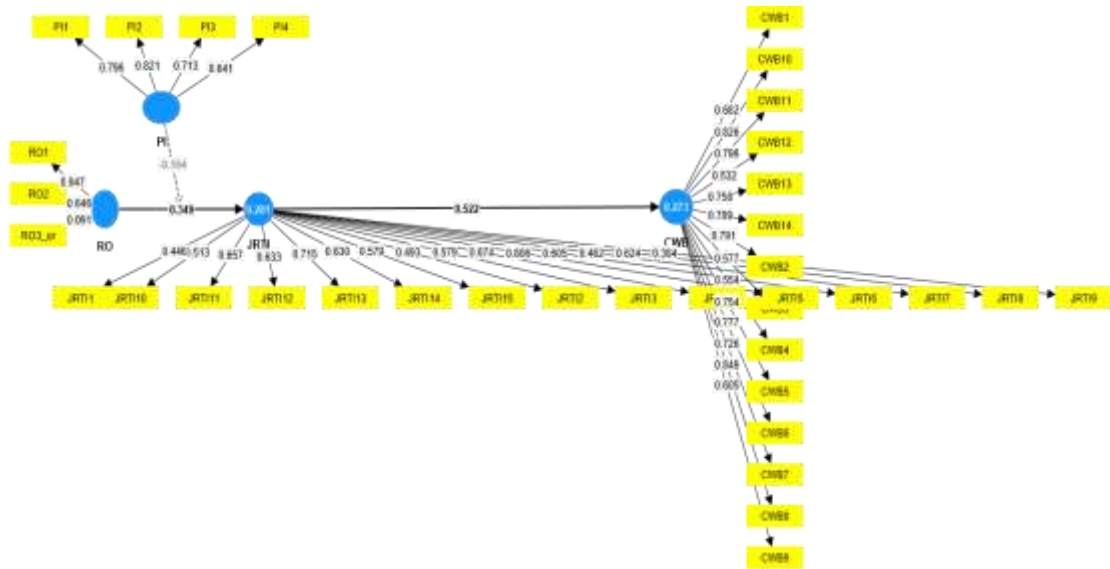
**Table 6** Mediation Analysis

	B	SE	t	P
RO → CWB	0.31	0.16	1.85	0.06
RO → JRTI	0.28	0.14	2.01	0.04
JRTI → CWB	0.45	0.15	2.85	0.00
RO → JRTI → CWB	0.18	0.16	1.10	0.27
Bootstrap Results	Indirect effect	LLCI	ULCI	
	0.13	-0.00	0.38	

**Table 7** Bootstrap Results

	Effect	SE	t	p	LLCI	ULCI
Direct effect of X on Y	.1816	.1639	1.1084	.2733	-.1480	.5113
	Effect	Boot SE			BootLLCI	BootULCI
Indirect effect of X on Y	.1311	.0951			-.0005	.3894

**Figure 3** CFA Analysis using Smart PLS



**Discussion**

The results of this study indicate that role overload has a significant positive effect on counterproductive work behaviors, thus Hypothesis 1 is accepted. This hypothesis is also supported by earlier researchers. Based on Stressor-Emotion Model, when employees come across stress-inducing situations at work, they start feeling all sorts of negative emotions and, eventually they end up behaving in an anti-social manner. Overloading employees is detrimental for the organization because it can lead to negative retaliation from employees, who feel like they're getting totally taken advantage of (Nnaebue, 2020). In Punjab, hospital staff members serving in the public sector, are over-burdened by their managers and they react by adopting deviant work behaviors.

**Table 8** CFA Analysis using Smart PLS

	Cronbach's alpha	Convergent Validity	
		Composite reliability (CR)	Average variance extracted (AVE)
CWB	0.929	0.934	0.522
JRTI	0.869	0.866	0.356
PI	0.735	0.73	0.557
RO	0.479	0.768	0.441

Results show that role overload has a positive relationship with job stress, thus second hypothesis in this research is also accepted. Role overload is highly influential in causing job stress (McGrath, 1982). It is also supported by older research. When hospital employees are assigned extra tasks, which are beyond their capacity, stress is the result.

From the statistical analysis of this study, it is evident that job stress has a significantly positive impact on counterproductive work behavior, thus the third hypothesis is supported. Krischer et al. (2010) found that perceived injustice within the organization contributes to stress, ultimately resulting in counterproductive work behaviors. It has been observed in public sector hospitals of Punjab, Pakistan that employees retaliate because of added stress imposed on them.

The moderated regression analysis indicates that perceived injustice strengthens the positive effect of role overload and job stress, thus, H-4 is accepted. Overload contributes to organizational injustice, leading to negative outcomes for employees, including



counterproductive work behaviors (Ezeh & Etodike, 2017). In Punjab, the hospital employees of the public sector hospitals are greatly stressed because they perceive overwork as injustice. The fifth hypothesis of this research study is also supported by the results of the research analysis performed using SPSS statistical software. Previous research suggests that stressful events and conditions at work (job stressors) can elicit negative emotions and behaviors in employees (Spector & Jex, 1998), and the perception of workplace stressors can lead to engaging in CWB (Cullen & Sackett, 2003). The healthcare workers in Government hospitals of the Punjab, face role overload, which causes increased stress in themselves, resulting in counterproductive work behaviors.

### **Conclusion**

To sum up the whole research project, the study was executed in the public sector hospitals of the Punjab. The respondents were middle level employees (healthcare workers). The root causes behind the counterproductive work behaviors of the healthcare staff were explored by the use of a questionnaire and analysis was done by using SPSS and Smart PLS software. Data was collected from the Government hospitals of the major cities of the province. It was found out through the research analysis that increased workload on employees beyond their capacity causes job stress in them, which rises gradually with time, leading to development of counterproductive work behaviours, which are detrimental, both for the organization and the patients as well. In such a scenario, perceived injustice plays the role of a moderator. Perceived injustice strengthens the relationship between work overload and counterproductive work behaviors.

**Recommendations:** There must be present clear job descriptions for all employees of the organization, which must be communicated to them. The hard-working employees must be given their due appreciation or reward. Counselling of the employees must be done, who are in need of it. There must be equal distribution of workload or duties among the staff and they should be rotated periodically and equitably. Training of managers on leadership skills, human resource management and communication skills must be undertaken. The managers must promote team work.

**Limitations and Future Research:** The time duration for this study was short. It was difficult to cover most hospitals of public sector across the province. The study was cross-sectional and one-time data collection was undertaken. The responses are not much reliable.

As regards, future directions, I would suggest the future researchers to conduct a longitudinal study to understand the temporal dynamics of the variables. Gender differences in perception of injustice, work overload and counterproductive work behaviours may be studied as well. Intervention strategies may be devised and tested, aimed at reducing perceived injustice and job stress. A study based on the same variables can be applied to other industries as well, such as mining and agriculture industry.

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