

Does Gender Inequality Lead to Increased Burnout in Female Healthcare Workers in Saudi Arabia? Linking Managerial Role and Internal Relationship with Reduced Burnout

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Objectives: To evaluate the impact of gender inequality (GIQ) on burnout (BR) among female healthcare workers in Saudi Arabia by incorporating the moderation effect of managerial role (MR) and internal relationship (IR). **Methods:** Survey-based research was conducted through non-probability sampling and a sample of 112 participants was utilized for analysis. Using AMOS, data were analyzed using confirmatory factor analysis and structural equation modeling. **Results:** The findings showed that a positive and significant relationship existed between GIQ and BR in female healthcare workers in Saudi Arabia. Similarly, the moderating impact of MR and IR was found to be significant. However, while the MR strengthened the positive association between GIQ and BR, the IR suppressed the positive association between the two. **Conclusion:** The study provides implications for managers, healthcare workers, and policymakers to put greater efforts into reducing GIQ for an improved work environment and reduced burnout for female healthcare workers.

Keywords: gender inequality, burnout, managerial role, healthcare workers, internal relationship, health behaviors.

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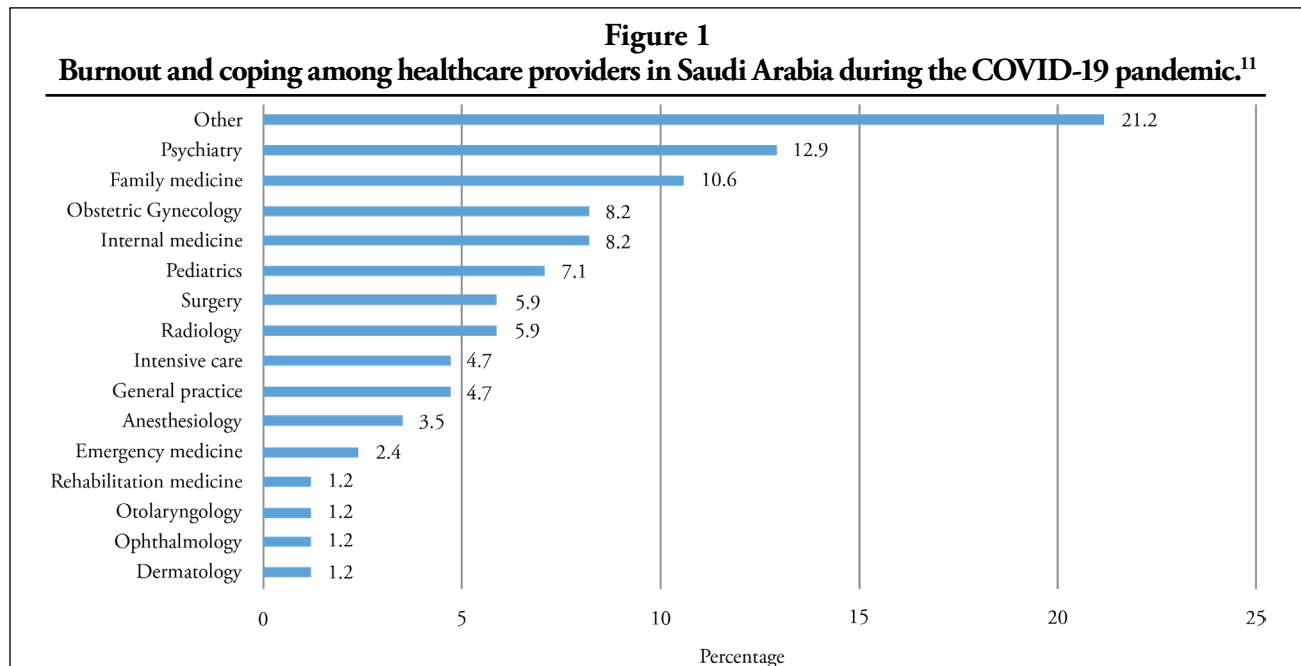
Among healthcare workers, burnout is not a newly recognized issue;¹ it is also associated with high levels of substance abuse, depression and anxiety.² Job burnout is relatively high among healthcare workers in Saudi Arabia.³ Due to COVID-19, the level of job stress has increased, and the job and work-life balance has been disturbed a lot, which is a significant reason for increased job burnout among healthcare workers in Saudi Arabia.³ Globally, burnout syndrome has drawn much attention of healthcare professionals due to the increasing workload, which needs to be handled.⁴ Burnout has drastic effects on the individual's physical well-being, mental health and health behaviors.^{5,6} Previous studies have indicated that increased stress and chronic burnout lead to decreasing health behaviors. Burnout has been identified as a state of emotional, mental, and physical exhaustion attributed to workplace stress. The increase or presence of burnout can lead to decreased health behaviors resulting in a lack of sleep, physical activity, and poor eating

schedules and habits.⁷ The three factors that make up burnout syndrome and could cause a public health outbreak are reduced personal accomplishment, emotional exhaustion, and depersonalization.⁸

Within the medical field, burnout has been associated with declining quality of care, rising rates of employee resignation, increased medical errors, decline in patient safety, rising absenteeism rate from work frequently and sometimes the desire to quit the profession as well.⁹ Healthcare personnel are highly susceptible to burnout, as indicated by mounting evidence. Although, the factors on which the significant prevalence of burnout depends are the settings of the clinic, the profession, and the sample population.¹⁰ For example, the results of a formally conducted cross-sectional study in the Southern region of Saudi Arabia by Siraj et al.³ have shown that 88% of healthcare practitioners suffered from emotional exhaustion. This study sampled 187 nurses and 95 physicians employed in various emergency departments. The results also showed that respiratory therapists had multiple levels of burnout among the three

dimensions: 73% with low personal accomplishment, 98% with depersonalization, and 77% with emotional exhaustion. This study also included 66 respiratory therapists who were employed in the Saudi Arabian capital's major tertiary care hospital.³

During the pandemic, burnout and coping stress activities had increased tremendously. Figure 1 depicts the burnout and coping among healthcare providers in Saudi Arabia during the COVID-19 pandemic.



Moreover, chronic burnout can also increase the risk of developing mental and physical health problems like depression, cardiovascular diseases, autoimmune diseases, diabetes, and anxiety. Thus, researchers need to explore burnout within the context of health behaviors to propose appropriate coping strategies.

In addition, gender discrimination among female healthcare workers negatively influences their career development, health behaviors and job satisfaction.¹² Only a few studies have analyzed how gender discrimination experiences modify during the times of the strain of health systems.¹² According to WHO, job burnout is commonly defined by some key factors including lack of achievement, a sense of ineffectiveness, detachment from work, feelings of cynicism and overwhelming exhaustion.¹³ Job burnout is observed to be relatively higher in helping occupations such as healthcare workers and teachers, but this is also increasing noticeably in other professions now due to high job-related stress.¹⁴

Literature Review

Theoretical Background

Theories explain the burnout phenomenon: the

Job Demands-Resources (JD-R) model¹⁵ and the Conservation of resources theory.¹⁶ The Job Demands-Resources model classifies elements contributing to job stress and burnout as job demands or resources. Environmental stressors such as severe workloads, lengthy working hours, and rotating shift schedules can all lead to emotional tiredness^{15,17} while feedback, autonomy, job security, and supervisor assistance are all examples of employment resources,¹⁷ all are critical for achieving corporate objectives, supporting personal growth, and mitigating the effects of job pressures. High job expectations, such as those healthcare personnel face significantly predict burnout.

According to the Conservation of Resources (COR) theory, people use various resources to complete tasks at work, including time, cognitive attention, and physical energy. Still, they need to replenish those resources during breaks to prevent stress.¹⁶ According to a study¹⁸, declining economic security also led to an increase in female employment in Zambia. Female labor force participation is frequently countercyclical over the world. With the expansion of industries including manufacturing,

tourism, health care, and contact centers that are looking for women employees, the opportunity cost of women staying at home also rises.^{19,20}

The extant literature on gender inequality and burnout indicated that when employees experience burnout, they have relatively less energy to engage in positive behaviors which can improve their health. The imminence of stress and anxiety can lead to the development of a vicious cycle that worsens health behaviors and can increase the feelings of burnout.

When employees are prone to job burnout, their overall health behaviors also get disturbed. The conceptual framework of this paper explains how gender inequality increases burnout in female healthcare workers and how managerial roles and internal relationships can affect burnout.

Impact of Gender Inequality on Employee Burnout

Saudi Arabia has a monarchical form of governance, with the constitution being regulated by a rigorous application of Islamic law.²¹ Job stress predicts occupational burnout considerably, and gender and marital status attenuate this association.²² Job stress, in particular, is associated with a higher level of occupational burnout among female police officers and especially the married ones. Past research studies have emphasized the relevance of gender awareness and family support in minimizing occupational burnout among police officers.²² It was discovered that gender harassment significantly impacted expatriates' job happiness and frustration.²³

Furthermore, the researchers discovered a substantial relationship between frustration and job satisfaction, but no moderating influence of general job stress was discovered.²³⁻²⁵ Past research also discussed how market forces perpetuate and reinforce gender inequalities, limiting women's capacity to contribute to inclusive economic progress. It examined labor market inequalities, intersectionality, and how gender inequalities within and beyond the household constrain women's ability to participate in paid work.²⁶⁻²⁸

To put it differently, the persistent gender inequality in the labor market would hinder women's equal access to job opportunities, even if there were an increase in job availability due to increased focus on employment-centered growth.^{26,29} Gender inequality is defined as discriminatory practices based on a person's gender, frequently resulting in unequal treatment of women and girls in health, education, and the labor market. Similarly, job burnout refers to the depletion of the employees' resources with time, and influences their

health behaviours, these may be related to the employee's mental and physical health issues and concerns such as musculoskeletal disorders, depression, and anxiety.³⁰ According to the United Nations, these discriminatory practices can impair their ability to develop to their full potential and can operate as severe impediments to human development.^{31,32} Additionally, some past research discussed the challenges faced by nurses, who are predominantly women, including the responsibility of balancing work and family and the physical and mental demands of the job. The study emphasized the urgent need to address these challenges to prevent nurse burnout and job turnover, contributing to the nursing shortage globally.³³ Accordingly, this study framed its first hypothesis as under:

H1: *Gender inequality has a positive and significant impact on employee burnout.*

Moderation of Managerial Roles

Recent years have seen a dramatic development in Saudi Arabia. Fairness for women and their employment have been at the forefront of these advancements. Even though women make up about half of the population in Saudi Arabia, they have encountered several barriers to obtaining leadership positions.³⁴ A supervisor is considered an agent or representative acting on behalf of the organization. Several studies have concentrated on the important function that leadership and climate have in fostering secure conduct and avoiding mishaps.^{35,36} The past study determined that family-supportive supervisor behaviors moderated the relationship between work stress and feelings of tiredness and whether exhaustion mediated the link between work stress and academic employees' publication activity.³⁷ The study discovered that work-family conflict mediated the association between social support and burnout, with males experiencing complete mediation consequences due to professional interference with family and women having full mediation effects of family support with burnout. This shows that gender moderates these mediation procedures and highlights a shift in the uneven assignment of family duties to men and women, despite women being the primary contributors to domestic labor and related chores.^{38,39} Accessibility and attractiveness of the labor market in Saudi Arabia are key areas of focus for the National Transformation Program. The main goal was to find solutions to the challenges that the Kingdom's economic sectors would face due to improving the labor force.

Consequently, this calls for improving the status of women in the workplace and providing them with environments conducive to their success.⁴⁰ Sociological and occupational health researchers should consider gender roles while studying work settings and vocations.⁴¹ According to prior research, supervisors are more engaged at work and have lower turnover intentions than line-level employees. Yet, no discernible difference in job satisfaction exists between the two occupations. The position of the employees influences the impact of absorption on job satisfaction and devotion on turnover intentions.⁴² Hence, this leads to the framing of the second hypothesis of this study:

H2: *Moderation of Managerial roles negatively affect the association between gender inequality and employee burnout.*

Moderation of Internal Relationships

Employee-employer ties, as well as employee-organization relationships, are critical components of internal relationship management in firms. Prior research on this topic has focused mostly on human resource management and organizational behavior/theory.⁴³ The interaction between employee relationships and knowledge sharing is one topic of interest. There is increasing evidence that burnout is very common among HCPs. The sample demographic, therapeutic settings, and profession all significantly impact burnout prevalence estimations. For instance, a prior cross-sectional research in Saudi Arabia's Southern area.⁴⁴ A past study investigated the impact of organizational-based self-esteem on employee response relationships. According to their results, employees with high levels of organizational self-esteem were less susceptible to organizational uncertainty.^{45,46} Past research investigated how work stress impacts the correlation between teachers' workload and their professional identity in Saudi Arabia. According to the study, work stress among teachers harms the relationship between workload and professional identity.⁴⁷ Using a transactional stress and affective events theory model, the past study investigated the effects of different types of injustice on the relationship between job stress and employee behaviors. Field data from Pakistan's service sector show that job stress has a detrimental impact on innovation, citizenship, and retaliatory actions when levels of injustice are high.^{48,49}

Further research proposed that academic burnout and loneliness were negatively related to student involvement while academic burnout and loneliness were positively related. An internal locus of control moderates the link

between academic burnout and student involvement. In addition, loneliness moderates the mediated link between academic fatigue and student involvement.⁵⁰ A past study examined the relationship between managerial communication, perceptions of procedural justice, and employee attitudes during a divestiture. Effective communication improves perceptions of procedural justice, which impacts future commitment. The perceived justice of divestiture affects trust and commitment more significantly than the perceived justice of layoffs.⁵¹ The third and final hypothesis of the study runs thus:

H3: *Moderation of Internal Relationships negatively affect the association between gender inequality and employee burnout.*

Methodology

The current study adopted a "positivism research philosophy." As per the positivist philosophy of the research, only authentic and accurate information should be considered for investigation purposes. This research approach was objective, allowing the researcher to collect quantifiable data to be further used for analysis and draw a conclusion of study.⁵² This is why the investigation opted for this research philosophy. This study adopted the quantitative research method because the study conducted a close-ended survey to collect the data in numerical form that was further tested using statistical software. Survey-based research was conducted through non-probability sampling. The population of the study was the healthcare workers in Saudi Arabia. The quantitative method was the most appropriate for the current study. The study measured burnout using a 10-item scale from Angelo et al.⁵³ For measuring Managerial Roles, the study took a 5-item scale from Pua et al.⁵⁴ Internal relationships were measured based on the 5-item scale from Liao et al.⁴³ Whereas, Gender Inequality was measured based on a 7-items scale from Egbuta³²

Results

Data analysis was conducted on a sample of 112 participants, out of which 86.9% were female, as the aim was to evaluate burnout in female healthcare workers. 13.1% of the participants were male. 24.0% of the participants were under 25, 29.2% were between 26 and 30 years old, 31.1% were 31 to 35 and 15.7% were above 35 years old. Regarding work experience, the majority of the participants (43.6%) had an experience of 2 to 5 years, followed by 33.3% with a work experience of 5 to 8 years. Furthermore, 11.2% of the participants had worked for over 8 years.

Table 1 shows the descriptive statistics, including mean and skewness values. The mean score for burnout is the highest (3.50), while the smallest

mean score is for IR (3.29). As per a few studies,⁴⁶ the recommended threshold for skewness lies between -2 and 2. Table 1 confirms the normality of the data.

Table 1
Descriptive Variables

	N	Min	Max	Mean	SD	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
BR	112	1.00	5.00	3.5093	1.00741	-.719	.138
MR	112	1.00	5.00	3.3949	1.02332	-.345	.138
IR	112	1.00	5.00	3.2910	1.13054	-.279	.138
GIQ	112	1.00	5.00	3.4698	.89753	-.512	.138
Valid N (list wise)	112						

BR=Burnout, MR=Managerial Role, IR=Internal relationships, GIQ=Gender inequality

Data were tested to ensure the validity of the constructs. Composite reliability was utilized to determine the internal consistency. Table 2 shows that CR is equal to or greater than 0.8, satisfying the requirement as per previous scholars.⁴⁶ AVE is lower than CR, and the

values are greater than 0.5, further confirming convergent reliability in the data. Likewise, discriminant validity is also established as the maximal reliability values greater than CR;^{47,48} furthermore, the square root of AVE s is greater than the intra-item correlation.

Table 2
Convergent and discriminant validity

	CR	AVE	MSV	MaxR(H)	BR	MR	IR	GIQ
BR	0.925	0.578	0.691	0.927	0.761			
MR	0.895	0.632	0.525	0.907	0.700***	0.795		
IR	0.898	0.637	0.691	0.900	0.831***	0.724***	0.798	
GIQ	0.800	0.500	0.304	0.865	0.551***	0.481***	0.543***	0.627

BR=Burnout, MR=Managerial Role, IR=Internal relationships, GIQ=Gender inequality

The results for KMO and Bartlett's Tests are displayed in Table 3. The value of the KMO test is 0.923, which is greater than 0.6;⁴⁹ hence,

the adequacy of the sample was established. The suitability of the data was confirmed as Bartlett's Test of Sphericity is significant with a p-value below 0.05.

Table 3
KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.923
Bartlett's Test of Sphericity	Approx. Chi-Square	6010.047
	Df	325
	Sig.	.000

Table 4 shows the fit indices of the model. The model exhibited a fit with the data as the values for

the indices were within the recommended range⁵⁰ ($\chi^2/df=3.003$, IFI=0.904, CFI=0.903, RMSEA=0.08).

Table 4
Confirmatory Factor Analysis

CFA Indicator	Threshold Value	Observed Value
CMIN/df	Less than 5.00	3.003
IFI	Greater or equal to 0.90	.904
CFI	Greater or equal to 0.90	.903
RMSEA	Less than or equal to 0.08	0.08

Figure 2 demonstrates the model of confirmatory factor analysis. The standardized factor loadings and the correlation between the dimensions are indicated for each construct.

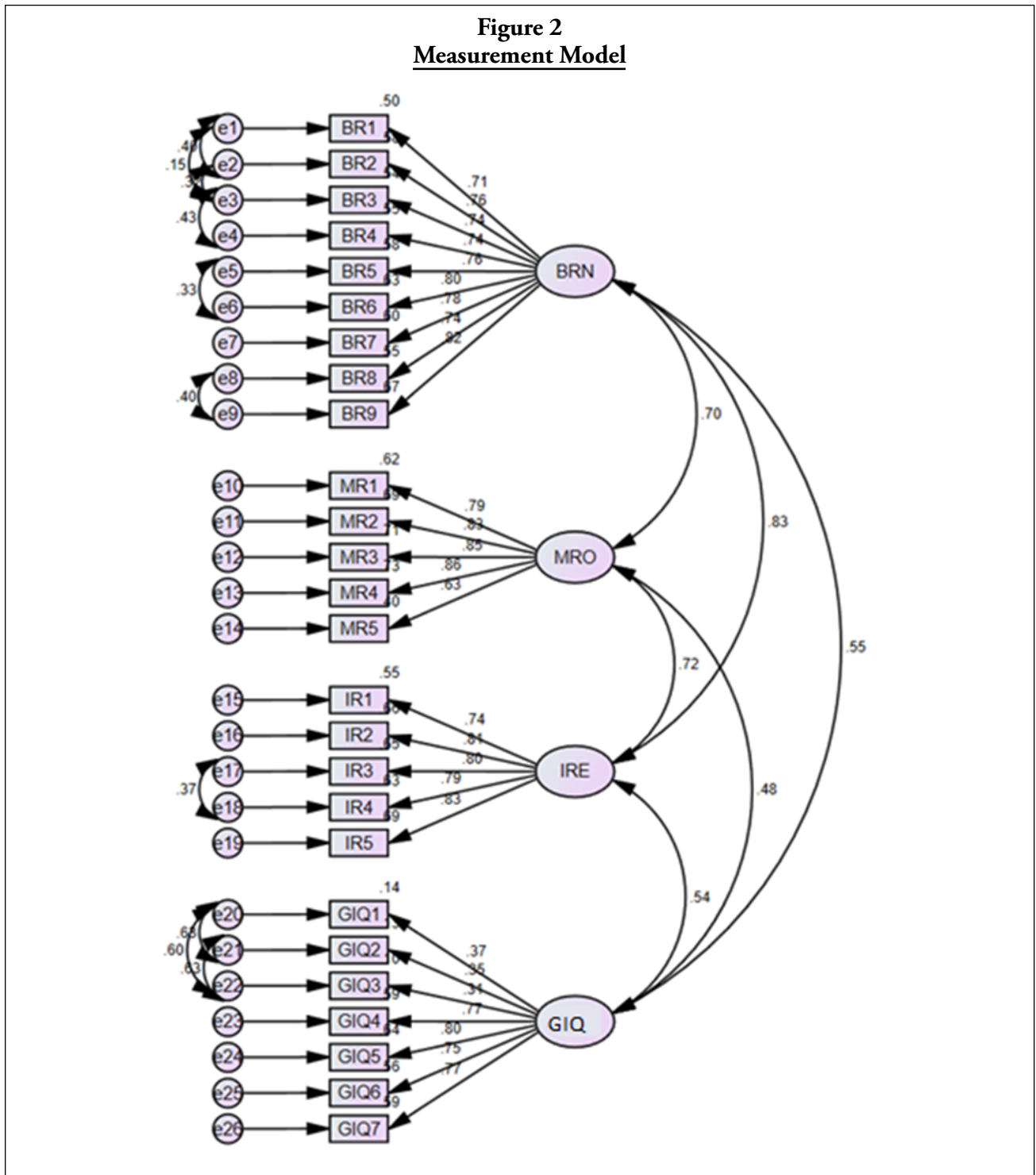


Table 5 shows the estimates of the correlation amongst each variable. It can be observed that all

the values are above 0.5, and no cross-loadings exist.

Table 5
Rotated Component Matrix

	Component			
	1	2	3	4
BR1	.706			
BR2	.733			
BR3	.745			
BR4	.686			
BR5	.740			
BR6	.749			
BR7	.722			
BR8	.734			
BR9	.756			
MR1		.748		
MR2		.770		
MR3		.815		
MR4		.793		
MR5		.517		
IR1			.566	
IR2			.597	
IR3			.627	
IR4			.615	
IR5			.647	
GIQ1				.795
GIQ2				.828
GIQ3				.830
GIQ4				.764
GIQ5				.817
GIQ6				.810
GIQ7				.770

BR=Burnout, MR=Managerial Role, IR=Internal relationships, GIQ=Gender inequality

increases burnout among female healthcare workers by 63.3%. Figure 3 represents this effect graphically.

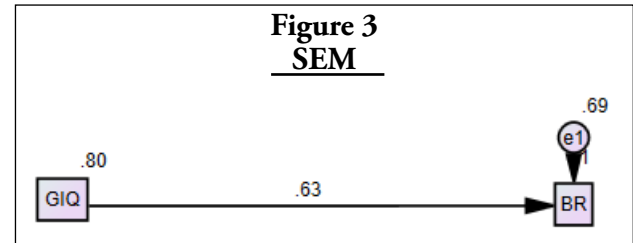


Table 6
Structural Equation Modeling

Hypothesized Path	Estimate	S.E	C.R	P value
GIQ→BR	.633	.053	12.044	**

BR=Burnout, GIQ=Gender inequality

The results of the moderation analysis established that both MR and IR significantly moderate the association between GIQ and BR ($p < 0.05$), as shown in Table 7. MR strengthens the association between the dependent and independent variable ($\beta = 1.218$), whereas IR has a negative effect on the positive relationship between GIQ and BR ($\beta = -1.789$). Figure 4 represents this moderation effect graphically.

Figure 3 and Table 6 show the results of SEM that were used to test the hypotheses. The first hypothesis measured the effect of GIQ on BR among female healthcare workers, and as per Table 6, the β value is 0.633 and significant with $p < 0.05$. Therefore, we accept the null hypothesis, and a unit increase in GIQ

Table 7
Moderation Analysis

Hypothesized Path	Estimate	Lower	Upper	P value
ZGIQXMR→BR	1.218	.625	1.780	.006
ZGIQXIR→BR	-1.789	-3.056	-1.136	.002

BR=Burnout, MR=Managerial Role, IR=Internal relationships, GIQ=Gender inequality

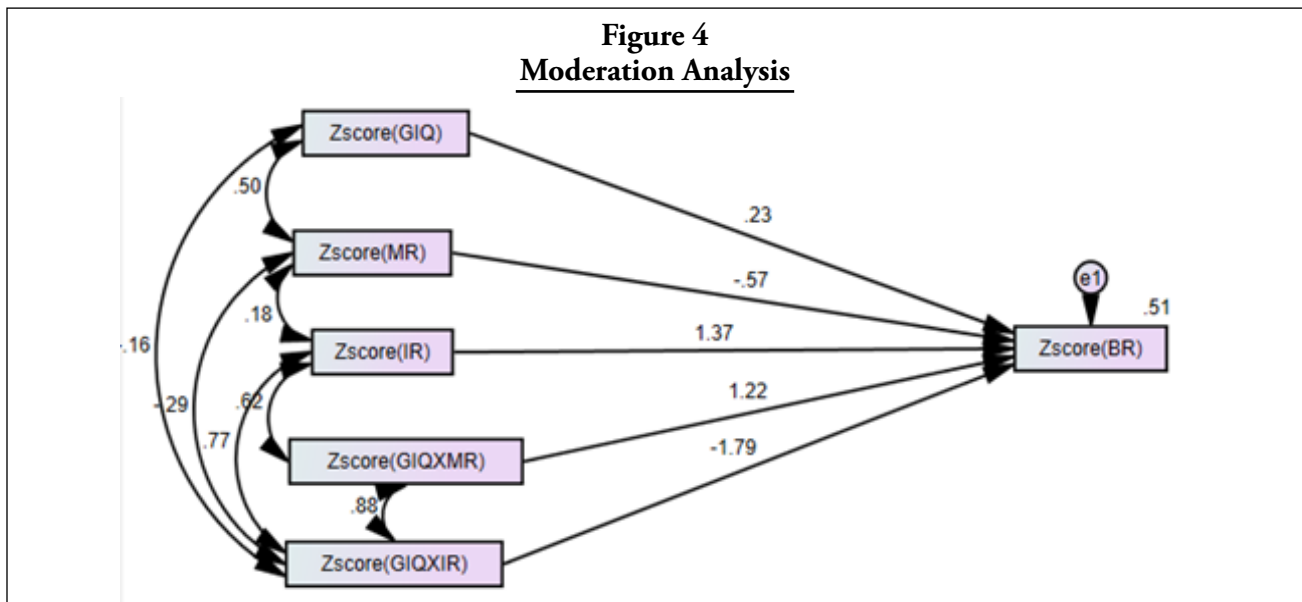
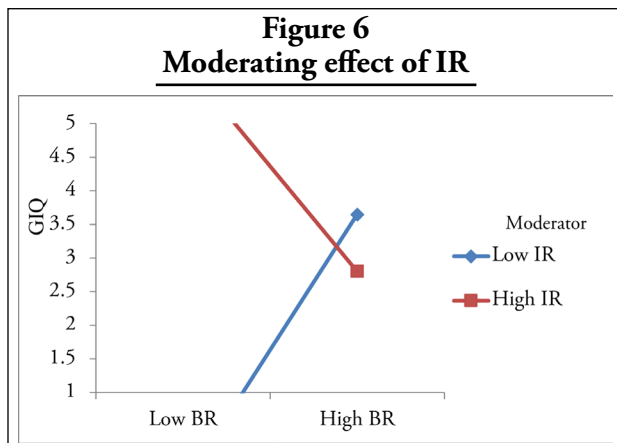
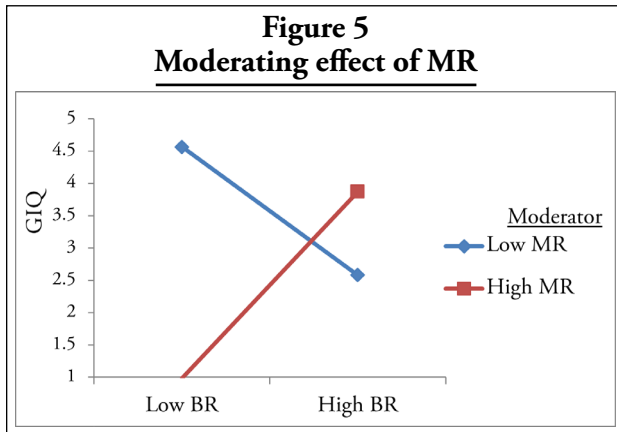


Figure 5 shows that MR strengthens the positive association between BR and GIQ. On the other hand, Figure 6 shows that IR dampens the positive linkage between BR and GIQ.



Discussion

For the past ten years, Saudi Arabia has been trying to enhance their economic worth by increasing human capital.⁵⁴ It is a well-accepted notion that the conditions and environment of a workplace cause a significant impact on the mental well-being of a company's employees, especially on the mental health of female employees who encounter multiple challenges at the workplace and family fronts.⁵⁵ In view of Kay-Eccles⁵⁶ and Mahavianpoor et al.⁵⁷, job burnout results from stress and tiredness due to a stressful workplace and lack of social and organizational support. In this regard, this study investigated the significant determinants which impact the burnout of female healthcare workers in Saudi Arabia. The study, in this accordance, explored the impact of gender inequality (GIQ) on burnout (BR) of female employees along

with the moderating role of managerial roles (MR) and internal relationship (IR) on association among GIQ and BR. In this regard, the study formulated three hypotheses of these relationships and relevant results accepted their importance, identified a significant impact of GIQ, and remarkable moderating role of MR and IR on GIQ and BR.

The H1 which stated that GIQ significantly impacts the BR of female healthcare workers was accepted and identified as significant by the results of this study. Numerous other studies validate this result. Aldossari et al.⁵⁸ show that male and female employees do not share the same work experiences, as female employees face more sexual discrimination at their workplaces. They are given unequal opportunities in terms of promotions and pay gaps. All these work experiences are serious indicators of work stress which increase levels of burnout in female employees. Hsu⁵⁹ highlights that individual working style, organizational factors, and discrimination against women are important factors that are related to the well-being of employees in firms in Taiwan. The social constructs of gender play a more prominent role in the burnout of female employees than biological constructs.⁶⁰ Accordingly, gender inequality is a significant determinant that impacts the burnout of female healthcare workers in Saudi Arabia.

The results of H2 identify that the managerial roles significantly moderated the relationship between gender inequality and burnout of Saudi female healthcare workers. The demographic composition of managerial roles has important consequences on mental well-being as they are critical actors who shape the stress-free work environment.⁵⁶ Stanley et al.⁶¹ highlight that the interaction between high work demands and poor managerial support is significantly associated with the social work stress of employees. Alhalwachi et al.⁶² argue that female managers in Bahraini companies face numerous hurdles to progressing their careers. The autonomy of their decision and acquiescence to the norms are prominent hindrances female managers face. Accordingly, managerial roles enhanced the gender-based inequality for female employees and led them to have more burnout issues than male employees.

The H3 tested the phenomenon that internal relationships significantly moderate the relationship between gender inequality and burnout of female healthcare workers and as per the results the hypothesis was accepted. Hospital systems should arrange gender equality programs to improve the workplace climate and mental health of female workers.¹² Caprioli⁶³

highlights that organizations having a higher level of gender inequality are more likely to experience conflict in their internal relationships. According to Gilbar⁶⁴, healthcare workers with a strong sense of internal coherence experience less burnout than those with weak coherence levels. Subsequently, the internal relationship of healthcare workers significantly moderates gender inequality and burnout of female employees.

Conclusion

The present study investigated the impact of gender inequality (GIQ) on the burnout (BR) of female healthcare employees, along with the significant moderating role of managerial roles (MR) and internal relationship (IR) between GIQ and BR. The data was collected and organized through surveys provided to Saudi female healthcare workers. 112 successful responses were reported. The study findings identify that GIQ significantly impacts the BR of female healthcare employees. According to the results, the females who get victim of unequal workspace behaviors are more prone to retention and burnout. Therefore, it is crucial to understand that there is an important role of gender inequality which impacts the mental well-being of female employees at their workplace. In addition to this, MR and IR significantly mediate the relationship between GIQ and BR of female healthcare workers. This study discussed how crucial it is for managerial staff to understand this issue and how their policies and work environment created by them enhance gender inequality and raise the levels of burnout of female employees. The access to managerial jobs formulates and sustains inequality on the significant markers of gender inequality as their dominant positions and decisions in an organization impact their subordinates. The findings of IR's moderating impact indicate that the internal relationship between employees and their workspace interaction strongly impacts female employee's psychological health. It also illustrates that the employee's social network and support significantly influence employee retention and burnout. The prevalence of unfair and unequal conducts on a gender basis at workspace psychologically and physically impact female employees.

Research Implications and Limitations

This study provides significant theoretical implications by extending the literature on determinants that enhance the burnout of female employees. In this accordance, this study identifies gender inequality, managerial roles,

and internal relationship as important factors to enhance the existing literature on issues that leads female employees to burnout. In the context of practical implications, the study highlighted gender inequality as a significant issue. It caught the attention of managerial staff to reduce gender-based discrimination in their organization to reduce the job burnout of female employees efficiently. The practitioners and policy-makers of healthcare organizations thus enhance programs and campaigns to tackle the issues of gender inequality so a stress-free workplace environment can be created.

This study provides a significant contribution to existing literature; however, it incorporates some limitations. At first, this study collected data from healthcare workers, which contained a limited population and sample. The future can expand the study's sample and analyze these factors in a large population. A geographical limit is also encompassed by this study which calls for future studies in different cultural and national contexts besides Saudi Arabia. Future studies will be able to analyze the impacts of selected variables in different national contexts. Second, this study was limited in the selection of variables. Still, the impact of other factors like ethical leadership and job satisfaction can also be analyzed on the job burnout of female employees. At last, this study was limited by the cross-sectional time frame of collecting data; however, subsequent studies can also analyze relevant results within a longitudinal timeframe.

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