

# Rampart of Health-Specific Leadership and Social Support of Colleagues to Overcome Burnout in an Emotionally Demanding Situations: The Mediating Role of Stress

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**Introduction:** Past studies have neglected the role of resources that enhance motivation, such as health-specific leadership (H-SL) and social support colleagues (SSC), in dealing with the prerequisites of psychological health of workers, especially the duo of stress and burnout.

**Objective:** This empirical study aimed to identify the impact of psychosocial job demands (emotional demands) and psychosocial job resources (health-specific leadership and social support of colleagues) on the psychological health (stress, burnout) of 284 Malaysian industrial workers (who participated both times).

**Methods:** The Hierarchical regression analysis was employed to examine all study hypotheses and a time lagged study design was used with a lag of three months between T1 and T2 for data collection.

**Results:** The survey data found a significant impact of emotional demands on stress and burnout, while we found insignificant findings of health-specific leadership and social support from colleagues on workers' psychological health.

**Future Directions:** Future studies should consider the different formations of psychosocial job resources and higher dimensions of health promotion leadership.

**Keywords:** emotional demands, health-specific leadership, stress, burnout, Malaysia

## Introduction

Emotions are ubiquitous and fundamental to all aspects of social life.<sup>1</sup> According to Shepherd and Patzelt,<sup>2</sup> there is a common belief that certain individuals tend to be analytical and avoid emotional encounters, while others are passionate and actively seek out emotional experiences. Those who find their emotions uncomfortable are unlikely to try to understand or empathize with others' emotions. Similarly, if people view emotions as unproductive, they may hesitate to express them, particularly if they feel pressured to do so. Emotional demands, health-specific leadership, social support from colleagues, stress, and burnout are interconnected aspects of workplace well-being. If not managed effectively, emotional demands can cause stress and burnout, and leaders who prioritize employee health can help mitigate these negative effects.<sup>3</sup> In addition, social support from colleagues can provide a buffer against the negative impact of emotional demands and stress. By fostering a supportive and inclusive work environment, leaders can help their employees feel valued and empowered, leading to reduced stress and burnout.<sup>4</sup> Ultimately, prioritizing employee health and well-being is essential for promoting a positive work culture that benefits both individuals and the organization.<sup>5</sup>

Despite the potential benefits of Health-Specific Leadership (H-SL) and Social Support from Colleagues (SSC) there are still challenges that need to be addressed in the petrochemical industry. One challenge is that petrochemical

companies may not always prioritize the development of H-SL skills or provide opportunities for colleagues to build supportive relationships. Additionally, petrochemical workers may face additional stressors owing to the hazardous nature of their work, which may require additional support beyond that provided by the SSC. Therefore, the objectives of this study are twofold. The first was to examine the impact of psychosocial job demands (emotional) and resources (H-SL, SSC) on the psychological health (stress and burnout) of workers and, second, to study the influence of stress as a mediator in emotional demands, H-SL, SSC, and burnout relationships.

## Theory Building

Over the past few years, researchers have focused on the negative and positive effects of emotionally demanding situations in various environmental settings.<sup>6</sup> For organization, employee fulfillment of emotional job demands is necessary for success but, for employee, emotional demands often lead to feelings of inauthenticity which negatively affect their health and wellbeing.<sup>7</sup> Emotional demands refer to emotionally charged interactions at work<sup>8</sup> and have been highlighted by European Occupational Safety and Health as a key emerging psychosocial risk.<sup>9</sup> There are strong evidences by the western societies on the significance of emotional demands that act as a key stressor on the basis of investigation<sup>10</sup> however, there is scant research on this subject in eastern societies such as Malaysia.<sup>11</sup>

The effect of emotional demands on employee's psychological health depends in which area they are working<sup>6</sup> as these demands have received increased research attention in the services sector,<sup>12</sup> whereas the impact of it is overlooked to great extent in manufacturing sector.<sup>13</sup> Though emotional demands vary from services industry to manufacturing industry like health care and petrochemical respectively, but it is entirely based upon the perception of an individual which is more important than the presence of hazard itself.<sup>14</sup>

Similarly,<sup>15</sup> argued that, in healthcare settings, emotional demands arising from interactions with patients may be inevitable. Such demands are characterized by the emotional experiences attached to them: anger, despair or anxiety versus joy, pride, and relief. The former typically characterize the domain of stress.<sup>16</sup>

The emotion-motivation can be well explained and seen in context to Job Demands-Resources (JD-R) theory where generally emotional demands increases the risks of employees entering into antidepressant treatment<sup>17</sup> and motivational factors are instrumental to cope with negative psychological health outcomes.<sup>18</sup> Of the many psychological health factors studied in the literature, this study hypothesized the effect of emotional demands on stress and burnout, mainly because of its ignorance in eastern societies such as Malaysia, where psychological health concerns affect 70% of Malaysian employees.<sup>14</sup>

However, such health issues can be addressed tactfully if psychosocial resources are effectively utilized and one way of doing it is through health-specific leadership. Paganian et al<sup>19</sup> suggested mental health focused leadership positively influences teamwork. Similarly, Dunkl et al<sup>20</sup> differentiated health-promoting leadership with the transformational in which prior mainly focused and emphasizes employee wellbeing and health promotion. Social support from family, friends, colleagues, and supervisors is among the major contributors to psychological health issues. During work-related activities, supervisors must connect themselves with their subordinates emotionally to confront psychological problems such as anxiety, depression, stress, boredom, fatigue, and even health problems. The majority of research studies have neglected the role of resources that enhance motivation, such as health-specific leadership (H-SL) and social support colleagues (SSC), in dealing with the prerequisites of psychological health of workers, especially the duo of stress and burnout. In contrast, studies conducted in hazardous industries, where workers face high levels of stress and burnout, have emphasized the critical role of H-SL and SSC. In context with one of the hazardous industrial sectors like petrochemical industry, H-SL refers to leadership behaviors that are specifically focused on improving safety and environmental outcomes, such as providing technical guidance, promoting a culture of safety, and ensuring compliance with regulations. SSC, on the other hand, refers to the provision of emotional and instrumental support from colleagues in the workplace, which can help buffer against the stressor's petrochemical workers face.

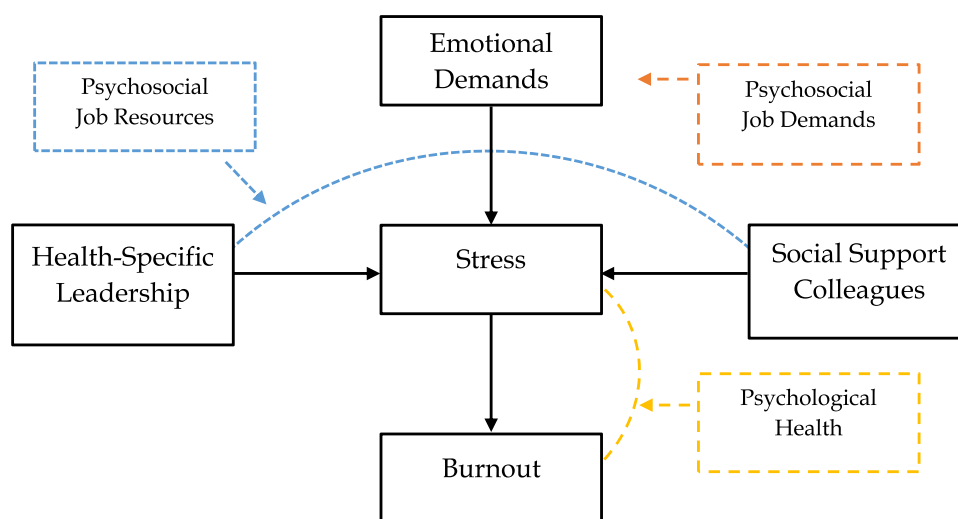
While considering the resource impact of these variables in lieu of JD-R theory, there are different studies with mixed findings in developed and developing countries. The authors found a stronger relationship between leadership and wellbeing with low socio-economic status of employees when conducting a meta-analysis of 58 studies.<sup>21</sup> The study was conducted in the Netherlands by Gurt, Schwennen, and Elke on 1339 employees and 147 leaders of six different

healthcare organizations, in which they were asked to rate their leaders' consideration of health in addition to their own level of well-being and work-related strains. These findings suggest that leaders who prioritize the health of their employees may positively impact their employees' well-being and job performance.<sup>22</sup>

Generally, employees who perceive support from colleagues and leaders who are focused on health are more likely to disclose and be open to sharing information on their mental health. A recent cross-sectional study on multiple industries in Taiwan with a sample of 288 employees, conducted by Pischel and Felfe,<sup>23</sup> highlighted the significance of health-specific leadership. Employees have shown a high level of trust in their leaders in creating a supportive environment that helps them improve their mental health. Gender specific job satisfaction such as in women are higher than man in lieu of health-specific leadership in a study conducted on German population.<sup>24</sup> Demographic characteristics such as age, education, and work experience also play a significant role in choosing positive or negative coping strategies. Zhang et al found that older workers in the Chinese construction industry who have used positive coping strategies, such as social support, had better health outcomes than young and less experienced workers, citing job demands as the most significant stressors.<sup>25</sup> A time-lagged study conducted by Mirza et al on health-centric leadership (which is defined as "leaders" explicit and therefore visible consideration of and engagement in employee health) and psychological health in a Malaysian population found a positive association between the two.<sup>26</sup> Another study on the Malaysian population conducted by Javaid and his colleagues in lieu of JD-R found that workers' perception of job demands and social support from colleagues as well as from supervisors, besides control over the job, were significant predictors of not only psychological health, but also physiological health-related outcomes.<sup>27</sup> Finally, Nayani et al recommended that leadership and management strategies should be tailored to meet the ongoing needs of distributed workers to meet the challenges of occupational health and safety outcomes.<sup>28</sup>

Despite the potential benefits of H-SL and SSC, the challenges in the petrochemical industry still need to be addressed. One challenge is that petrochemical companies may not always prioritize the development of H-SL skills or provide opportunities for colleagues to build supportive relationships. Additionally, petrochemical workers may face additional stressors owing to the hazardous nature of their work, which may require additional support beyond that provided by the SSC. Therefore, the objectives of this study are twofold. The first was to examine the impact of psychosocial job demands (emotional) and resources (H-SL, SSC) on the psychological health (stress and burnout) of workers and, second, to study the influence of stress as a mediator in emotional demands, H-SL, SSC, and burnout relationships.

Based on strong theoretical support, we will test the following study hypotheses which can further be seen in Figure 1, the theoretical framework of the study in lieu of JD-R theory.



**Figure 1** Theoretical Study Model.

H1: Emotional demands have a significant positive relationship on stress.

H2: Emotional demands have a significant positive relationship on burnout.

H3: High social support of colleagues has a significant inverse impact on stress.

H4: Focused health-specific leadership by colleagues has a significant inverse effect on stress.

H5: Stress mediates the negative relationship between social support from colleagues and burnout.

H6: Stress mediates a negative relationship between health-specific leadership and burnout.

## Method

### Procedure and Participants

Data were collected from technical workers employed in operational, maintenance, and production activities in the petrochemical industries of the Kedah and Terengganu states. Workers from six petrochemical organizations from two states participated in this study. Questionnaires were distributed with a covering letter to ensure the participants' confidentiality of their responses and consent of participation. The questionnaires were completed by the respondents during working hours and returned to the researcher in a sealed envelope provided by the researchers. The study approval was obtained in two phases, initially through research supervisor at the time of data collection from the department of management and humanities at UTP and later for research publication purpose from the ethical institutional review board of Lahore Garrison University (approval number: 2023-EIRB-005).

A time lagged study design was used with a lag of three months between T1 and T2.<sup>29</sup> At T1, the respondents were asked to complete a survey on emotional demands, social support from colleagues, and health-specific leadership. At T2, respondents were asked to complete a survey on burnout and stress. A total of 373 participants completed our survey at T1 while and T2 284 employees participated in the survey. Therefore, 284 completed surveys were employed for data analysis, as they were completed by respondents at both T1 and T2. The final sample comprised 203 male respondents (71%) and 81 female respondents (29%). The majority of the respondents had undergraduate qualifications (61%), and the largest age bracket was 25–30 years old.

### Measures

All study variables, except for health-specific leadership, were adopted from Isha et al<sup>30</sup> Emotional demands were measured using a 4-item scale (eg, "Do you have to deal with (or manage) other people's personal problems as part of your work?"). Responses ranged from one (Strongly Disagree) to five (Strongly Agree). Social support colleagues was measured using a 3-item scale (eg, "How often your colleagues help and support you, if needed?"). Responses ranged from one (Strongly Disagree) to five (Strongly Agree). Responses ranged from one (Strongly Disagree) to five (Strongly Agree). Stress was measured using a 4-item scale (eg, "How often have you been stressed?"). Responses ranged from one (Strongly Disagree) to five (Strongly Agree). Burnout was measured using a 4-item scale (eg, "How often have you been emotionally exhausted?"). Responses ranged from one (Strongly Disagree) to five (Strongly Agree). Health-specific leadership was measured using a 7-item scale (eg, "My supervisor discusses health-related topics with us") of.<sup>22</sup>

### Common Method Variance

Before proceeding to the final analysis, we examined whether there were any issues with the common method variance for this dataset. Although the data were collected in two-time lags, T1 and T2, because the data were collected from a single source, there is a possibility of common method variance.<sup>31</sup> We examined the possibility of common method variance by using Harman's one-factor test. If a single factor explains most of the variance in the dataset, there is a likelihood of common method variance.<sup>32</sup> The result of Harman's one-factor test revealed that single factor accounted for only 29.4%, confirming that common method variance is not a serious issue for this data set.<sup>33</sup>

## Results

Table 1 present the results for means, standard deviation, reliability, and correlation between all the major variables of the study. We employed hierarchical regression analysis to examine hypotheses H1 to H6 and the results for direct relationships are shown in Table 2. Hypothesis H1 predicted a positive relationship between emotional demands and stress. The results showed a strong support for this hypothesis ( $\beta = 0.48$ ,  $p < 0.01$ ), thus supporting H1. Hypothesis H2 predicting a positive association between emotional demands and burnout was also supported ( $\beta = 0.15$ ,  $p < 0.01$ ). Both hypotheses H3 and H4 presumed that social support colleagues and health-specific leadership will be negatively associated with stress. We found no support for both hypothesis H2 ( $\beta = -0.09$ ,  $p > 0.5$ ) and H3 ( $\beta = -0.02$ ,  $p > 0.5$ ). Hypotheses H5 predicted a negative relationship between social support colleagues and burnout, and hypothesis H6 predicted a negative relationship between health-specific leadership and burnout. No support was found for both hypothesis H5 ( $\beta = -0.01$ ,  $p > 0.5$ ) and hypothesis H6 ( $\beta = -0.04$ ,  $p > 0.5$ ).

We employed Process Macro developed by,<sup>34</sup> using recommended 10,000 bootstrap samples.<sup>35</sup> Mediation is achieved through this method if zero does not exist between the confidence intervals, that is, between lower limit (LL) and upper limit (UL). The results reported in Table 3 confirm that stress is a mediator between emotional demands and burnout (LL 0.25 –0.43 UL). Support was also found for the mediating role of stress between social support from colleagues and burnout (LL –0.28 – –0.09 UL). This was an interesting finding, considering that we found no support for the direct relationship between social support from colleagues and stress and burnout. Finally, no support was found for the mediating role of stress between health-specific leadership and burnout (LL –0.15 – 0.11 UL).

**Table 1** Mean, Standard Deviations, Correlation and Alpha Values

Variable	M	SD	1	2	3	4	5	6	7	8
1. Gender										
2. Age			-0.13*							
3. Education			-0.15*	-0.21**						
4. Emotional Demands	2.52	0.83	-0.06	0.02	-0.10	(0.80)				
5. Social Support Colleagues	3.75	0.73	0.04	0.06	0.02	-0.26**	(0.84)			
6. Health-specific Leadership	3.56	0.56	0.05	0.03	0.23**	0.08	-0.05	(0.63)		
7. Stress	2.59	0.76	-0.01	-0.14*	-0.15*	0.50**	-0.22**	-0.01	(0.82)	
8. Burnout	2.75	0.86	0.01	-0.02	-0.08	0.48**	-0.16*	-0.04	0.72**	(0.93)

Notes: The alpha values are shown diagonally; \* $p < 0.05$ , \*\* $p < 0.01$ .

**Table 2** Results of Hierarchical Regression Analysis for Direct Relationships

Independent Variables	Mediator Stress		Outcome Variable Burnout	
	Model I	Model II	Model I	Model II
Step 1 – Control Variables				
Gender	-0.05	-0.01	-0.01	0.04
Age	-0.11	-0.13	-0.01	0.06
Education	-0.12	-0.06	-0.08	0.03
Step 2 – Main Effect				
Emotional Demands		0.48**		0.15**
Social Support Colleagues		-0.09		-0.01
Health-specific Leadership		-0.02		-0.04
Stress				0.66**
$R^2$	0.03	0.29**	0.01	0.55**
$\Delta R^2$		0.25**		0.54**

Note: \*\* $p < 0.01$ .

**Table 3** Mediation Analysis

Relationships	Beta	SE	Confidence Interval
Emotional Demands → Stress → Burnout	0.33**	0.04	LL UL 0.25 — 0.43
Social Support Colleagues → Stress → Burnout	-0.19**	0.05	-0.28 — -0.09
Health-specific Leadership → Stress → Burnout	-0.02	0.06	-0.15 — 0.11

## Discussion and Conclusion

The first objective of this study was to examine the impact of emotional demands, health-specific leadership, and social support from colleagues on stress and burnout among industry workers. The results showed a strong support H1 ( $\beta = 0.48$ ,  $p < 0.01$ ) and H2 ( $\beta = 0.15$ ,  $p < 0.01$ ). The second objective was to identify stress as a mediator of emotional demands, health-specific leadership, social support from colleagues, and burnout among industry workers. The results confirm that stress is a mediator between emotional demands and burnout (LL 0.25 — 0.43 UL) and between social support from colleagues and burnout (LL -0.28 — -0.09 UL).

The results of the hierarchical regression analysis demonstrated that emotional demands were clearly a prognostic variable in depicting workers' psychological health. In our study, it was positively related to workers' perceptions of stress and burnout. Interestingly, the two job resource factors, health-specific leadership, and social support of colleagues, have a negative relationship with workers' stress and burnout, but they are not significant in this time-lagged study design. Nevertheless, the structure of health-specific leadership as a job resource is not as clear as anticipated and supports our study results. The relationship between health-specific leadership and psychological health outcome variables may also depend on the consistency of leaders' behavior over time. Moreover, health-specific leadership is a new concept, and its insignificance could be related to its less-developed scale.<sup>22</sup>

One possible reason could be the issue of reflective and formative constructs, as we have considered health-specific leadership as a reflective construct. Past studies have considered four dimensions of leadership for health promotion: personal leadership practices, opportunities for professional development, decision latitude, work environment, and workplace quality.<sup>36</sup> Second, this might not come as a surprise because this study is the first to include such job resources in a stress–burnout relationship. The perceptions of study workers for health-specific leadership with general leadership may overlap, and they may have misunderstood the difference between the two. However, past studies have clearly distinguished sound general leadership practices from health-specific leadership.<sup>22</sup>

Contrary to our expectations, no direct effect of social support from colleagues on stress or burnout was observed. This is because we found that workers who work in production, operational, and maintenance activities in the petrochemical industry have a very tough routine that demands excessive attention and little interaction among workers. Smith et al<sup>37</sup> argued that, because of certain scenarios, workers start perceiving in a different manner, such as expressing limited knowledge, interaction, and collaboration with other colleagues, and some felt left out and alone.<sup>37</sup>

One of the limitations of our study is the conceptualization of health-specific leadership as a psychosocial job resource pertaining to social support from supervisors. Therefore, our study provides a comprehensive understanding of future studies on using emotional demands with other job resources, such as support from others (which helps achieve work goals and reduce stress and burnout), job control (which might reduce the effect of emotional demands), performance feedback (which may increase learning and objective measures), and role clarity (which enhances worker commitment).<sup>38</sup> Similarly, health-specific relationships with psychological health can be moderated by enhancing person-organization fit in future studies.<sup>22</sup> Such job resources may act as a bridge and can hit two birds with one stone (stress and burnout) through the emotion-motivation process to buffer the negative effects of emotional demands on psychological health and trigger positive outcomes by enhancing organizational commitment, worker well-being, intention to stay, work engagement, extra-role behavior, and superior work performance.<sup>38</sup> Future studies may consider a serial mediation like HS-L > SSC > Stress > Burnout or HS-L > ED > Stress > Burnout relationship.

Future research should continue to explore ways to promote H-SL and SSC in the petrochemical industry as well as strategies for addressing the unique challenges faced by petrochemical workers. Considering the challenges confronting workers in the psychosocial workplace environments of developing countries, we believe that controlling psychosocial emotional demands through effective psychosocial intervention strategies is important. By looking into diverse cultural context of Malaysia, study results will help managers to add relevance in the Malaysian organizations by creating a supportive and healthier workplace environment for workers wellbeing – if carefully address emotional demands as a critical factor in lieu of local community.

## Data Sharing Statement

This will be provided on reasonable request.

## Ethical Approval

Approval obtained from the Ethical institutional review board of Lahore Garrison University (approval number: 2023-EIRB-005).

## Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

## Disclosure

The authors report no conflicts of interest in this work. All authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interests in the subject matter or materials discussed in this manuscript.

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