

ROLE OF SELF-COMPASSION AND PSYCHOLOGICAL SAFETY ON BURNOUT AMONG HEALTHCARE PROFESSIONALS IN SIALKOT

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ABSTRACT

Healthcare professionals are more likely to experience burnout, a psychological condition brought on by work-related stressors that last a long time. Self-compassion, the non-judgmental observation of one's own pain and failure while comprehending that these are a part of being human, is one of the individual differences that can protect against burnout (Hashem & Zeinoun, 2020).

*The study aimed to inspect the role of self-compassion and psychological safety on burnout among healthcare professionals. This crosssectional study was conducted on 300 medical workers (N=150 men, N=150 women) of different public and private sector hospitals. The data was collected through a purposive sampling technique. Self-Compassion Scale ShortForm (Raes et al., 2011), Oldenburg Burnout Inventory (Demerouti & Nachreiner, 1998) and Neuroception of Psychological Safety Scale (Morton et al., 2022) along with a self-developed demographic sheet were administered to participants for measuring study variables. For data analysis, Descriptive Statistics, t-test, Pearson Product Moment Correlation Coefficient and Regression analysis was applied using SPSS (V-25). The results showed a significant ($p < 0.01$, $p < 0.05$) relationship among all study variables i.e., self-compassion, burnout, and psychological safety. Findings also revealed that burnout has a significant and negative correlation with self-compassion and psychological safety. ($r = -1.83$, $**p < 0.01$). Whereas self-compassion and psychological safety were significantly and positively correlated with each other. ($r = .425$, $**p < 0.01$). T-test analysis revealed that there was no significant difference exists in burnout rate between males and females. As per study findings, it is concluded that having high self compassion and psychological safety reduce the risk of burnout among medical professionals.*

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1. INTRODUCTION

Advanced researchers immensely probing positive traits of human nature and also investigating how they change negative outcomes into positive ones. Self-compassion is one of the positive traits of human nature. In the previous two decades, the research on self-compassion and how it affects physical as well as psychological well-being is growing vastly. Compassion is defined as showing concern, love, care, sympathy, tolerance, warmth, understanding, and kind-heartedness towards oneself in the same way as an individual shows it for others. When the individual is confronted with failures and adversities it's very important for him to understand the situation and then accept himself as a worthy person instead of inhospitably judging, hating, and blaming the self (Bano et al., 2023). Moreover, individuals who grow up in a secure and stable atmosphere tend to own greater self-compassion as compared to those who are raised with critical parents, insecurities, and an environment full of conflicts. (Waite, 2023).

Philosophical theories proposed three main elements of self compassion that are mindfulness, common humanity, and kindness. Mindfulness which is a nonjudgmental pattern of viewing and observing our negative thoughts with the intention of neither suppressing them nor exaggerating them but to it allows us to rationally resolve the situation from its roots. Otherwise, if he continues to suppress the negative feelings it will ultimately cause emotional imbalance and psychological distress. The second element is a common humanity that involves recognizing personal failures, inadequacies, mistakes, and faults as a part of human experiences. Common humanity involves recognizing that everyone in this world fails and does faults; you are not the only one who is imperfect. The third and last element is Self kindness is treating yourself with kind and soft-heartedness, support, and understanding towards oneself (Neff & Dahm, 2015).

Psychological safety refers to the individual's belief that as a team member, he is free and independent to speak up with new ideas and will not

be punished or humiliated for sharing dicey ideas. Moreover, as a team member, he feels respected and accepted. (Frazier et al., 2017).

Perceiving high levels of psychological safety, increase the likelihood to feel more valued and supported by others. This positive social exchange fosters feelings of trust, reciprocity, and compassion. Moreover, a psychologically safe work environment can act as a protective factor against burnout. When individuals feel psychologically safe, they are more likely to have open and honest communication, and feel a sense of belonging that buffer the impact of stressors and reduce the risk of burnout. Conversely, when they do not feel safe to express their concerns, or voice their opinions, they may experience heightened stress, isolation, and emotional exhaustion (Yu et al., 2022).

Razzetti (2021) described basic three levels of psychological safety which are belonging, cognitive diversity, and innovation. These three levels are interconnected. When the first level is satisfied and achieved only then the individual can reach the next level. Belonging is the first level in which an individual experience belongingness and connectedness with other team members.

The burnout rate is prevailing excessively in human service occupations, especially among medical and health care professionals. As reported by Daldoul, burnout affected 27.8% of the general population among which 37% are health professionals, especially doctors. It is characterized as a stress-related psychological condition that leads to feelings of depletion and emotional exhaustion, depersonalization, negative feelings towards one's performance as well as achievements, and demotivation to perform. Burnout is caused by chronic stress in terms of workload (Daldoul et al., 2021).

There are three basic dimensions of burnout that are emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion refers to the draining out of emotions and the individual feels exhausted. It is caused due to conflicts at the workplace and workload. An individual is highly demotivated and tired from doing work. The other dimension of burnout is depersonalization which refers to detachment from the job and from co-workers. Detachment is first used as a coping strategy for the safety purpose by the individual when he became emotionally exhausted

but gradually this detached response turned into depersonalization. The third dimension is reduced personal accomplishment which refers to seeing oneself as a failure and loser. This is caused after the first two dimensions when a person feels unable to meet the demands of work (Brown & Pashniak, 2018).

The World Health Organization elucidated, burnout is now called a syndrome and has many negative outcomes for physical as well as psychological health. The well-known, The JD–R model suggests that workrelated burnout progresses through two mechanisms; the first one relates to unfavorable, highly stressful work conditions where job demands lead to tiredness and the second is associated with insufficient job resources that cause disengagement with evident motivation collapse (Demerouti et al., 2001). The JD–R model integrates earlier models of work motivation and job stress, such as the two-factor theory (Herzberg, 1966)

Research conducted in North Carolina by Kratzke and his colleagues on surgical residents to explore the significance of self-compassion training program on the improvement of well-being by using a mixed method approach. For three years they examined 95 participants, out of which only 40 residents completed both pre and post-burnout assessments. They found that self-compassion training greatly influenced burnout levels. Individuals had high burnout before the SC intervention. The rate of burnout especially emotional exhaustion reduced effectively after the intervention. Due to the reduced level of burnout, their well-being also improved (Kratzke et al., 2022). Another study conducted by Timofeiov-Tudose and Măirean (2022) examined workplace burnout, compassion, and professional quality of life among medical staff was conducted in 2023. The particular study examined the mediating role of selfcompassion in workplace burnout. The sample consisted of 189 healthcare workers and he found that compassion was negatively correlated with burnout and positively correlated with humor. So, compassion was considered a mediator factor in reducing and preventing burnout and other traumatic stressors.

After an explicit description, the current study focuses on how selfcompassion and psychological safety lessens the burnout threat for healthcare professionals. In developing country like Pakistan less research is available, this research hope to fill the gap. Moreover, this study also focuses on how males and females differ in the level of positive traits as well as the risk for job

burnout. The verdicts of the study will provide a ground for further research and interventions to improve mental wellbeing and to develop training programs for enhancing coping designs for healthcare professionals.

1.1 Purpose and Scope

Some individuals become more anxious and exhausted due to the chronic or stressful workplace environment that ultimately leads to burnout but some people effectively managed with difficulties when confronted with the same situation. So, the current study attempts to identify to what extent psychological safety and self-compassion is associated with burnout and adverse mental outcome. The findings of the study possibly would be useful for future research. This study can be helpful for organizational psychologists and counselors who want to develop intervention programs regarding to improving the self-compassion of medical staff. This study may also aid in introducing managing styles and coping techniques that can be beneficial to secure employees' psychological security. The results would provide understanding and awareness regarding the role of self-compassion in reducing burnout levels in healthcare professionals. The findings of the study could be helpful for healthcare workers as they will be able to know the importance of self-compassion in treating patients.

1.2 Hypothesis

1. There is significant negative relationship between self compassion and burn out
2. Psychological safety has negative relationship with burnout.
3. Males are more likely to experience high burnout than females.

2. RESEARCH METHODOLOGY

2.1 Research Design and Participants

In this study, a cross-sectional research design was used. A purposive sample of 300 participants (N=150 men, N=150 women), comprised up of healthcare workers, was taken from different private and government sector hospitals. The sample was within the age range of 24 years to 60 years that include doctors, physicians, nurses, and nursing assistants from hospitals in

urban areas from Sialkot city. As now a days women are working equally in number to men in health care sector so it was not difficult to get equal number of men and women in sample.

2.2 Inclusion Criteria and exclusion criteria

Only Nurses, Nursing assistants, Junior Doctors, and Senior Doctors of all healthcare departments were counted in. Individuals with Intermediate as a minimum level of education were included.

2.3 Instruments

Demographic form a demographic form was administered to gather the general data about participants. This included name, age, gender, family system, marital status, living area, economic status, healthcare sector, monthly income, designation, qualification level, and total job experience.

2.3.1 Self-Compassion Scale Short Form (Raes et al., 2011)

It consists up of 12-item with age range above 18 in order to measure their capacity of self-compassion. Respondents answer each item on a 5-point Likert-scale. Items are scored from 1=Never, 2=Rarely, 3=Sometimes, 4=Often and 5=Always. Reverse score items are 1, 4, 8, 9, 11, and 12. Before interpretations, total scores are calculated after reversing the negative items. Then find a total mean for the scale. It demonstrated good reliability ($\alpha \geq 0.86$) and a strong correlation with the long-form SCS $r = 0.97$ (Raes et al., 2011)

2.3.2 Oldenburg burnout inventory (Demerouti & Nachreiner, 1998).

This is a 16-item measure used for adults, to measure burnout in individuals who are working as a medical professional. It measures exhaustion includes physical, cognitive, and affective aspects whereas disengagement from work includes negative perception toward his work. Responses are evaluated on 4-point Likert scale with disengagement items are 1, 3, 6, 7, 9, 11, 13, and 15 whereas exhaustion items are 2, 4, 5, 8, 10, 12, 14, and 16. Scoring ranges from Strongly Agree (1) to strongly Disagree (4). Items 2, 3, 4, 6, 8, 9, 11, and 12, are reverse scored. The exhaustion (Cronbach's $\alpha = .87$) and the

disengagement (Cronbach's $\alpha = .81$) subscales were reliable and had good reliability. (Demerouti & Nachreiner, 1998).

2.3.3 Psychological Safety Scale (Morton et al., 2022)

Dr. Liza Morton with fellow colleagues carried out the study and developed this scale perception of Psychological Safety (NPSS). The NPSS scale consists of 29 items it is further divided into three subscales that are social engagement, Compassion and Bodily Sensation. For each item the scoring is according to strongly disagree=1, disagree=2, neutral=3, agree=4, and strongly agree=5. Total score and subscale values can then be calculated by a sum or mean of the items. Social subscale domain higher score in this domain means that the person feels safe, understood, and accepted. The total item on this subscale is 14. The next subscale is compassion higher score on this means the ability to feel compassion and empathy towards others the number of items on this is 7. The last subscale bodily sensation higher score on this subscale reflects internal calm and steadiness. This has 8 items. The Cronbach's alpha for the complete NPSS was .95. Social engagement was .93, selfcompassion was .94, and for bodily sensations, the subscale was .92, that interpretation of good internal reliability of the scale and subscales. (Morton et al., 2022)

2.4 Procedure

In the beginning, the synopsis was approval taken from the Departmental Ethical Review Committee (DERC) of the Department of Psychology, GC Women University Sialkot. Data collection was started after taking permission from the concerned authorities of the hospital. Participants of government and private hospitals from Sialkot filled out the assessment forms. The consent form and demographic sheet, Self-Compassion Scale Short Form, Oldenburg burnout inventory and Neuroception of Psychological Safety Scale were included in the research questionnaire after getting permission from the concerned authors of scales. Participants willingly contributed in the data collection. Consent was taken from each individual before participation. Respondents were briefed about the goals and paybacks of the study. Then instructions were given to them on how to fill out the form and how to rate the statements. After that, a questionnaire was given to them in order to collect

personal demographic information and responses on the other three assessment tools.

2.5 Ethical Consideration

All the ethical considerations were followed throughout the research process. Before initiating the research, approval was taken from DERC and concerned authorities. Permission from the authors of the scales was also taken before conducting the study. During data collection, the consent was taken from every participant and the confidentiality of all participants was exclusively maintained. Doctors were not disturbed during their duty hours. Before filling out the questionnaire, each participant was briefed about the objectives of the study. Moreover, the individuals who wanted to withdraw were not forced to complete the form.

3. FINDINGS AND DISCUSSION

3.1 Relationship of Self compassion with Burnout

The statistical results of this study have proved that medical professionals having more self-compassion are more likely to report low burnout (as mentioned in Table 1). This finding is consistent with the recent studies (Abdollahi et al., 2020; Vaillancourt & Wasylikiw, 2019) that showed nurses who had high self-compassion, reported low burnout and found a negative correlation between these two variables. They explained that being more compassionate towards oneself reduces the emotional impact of challenges and also reduces the stress. Another study also explained that individuals with high self-compassion have the ability to perceive stressful and terrifying situations at the workplace in a more efficient way. This reduces the risk of burnout and they felt less physical as well as emotional exhaustion (Dreison et al., 2018).

A cross-sectional study was conducted in Pakistan, Lahore by Ali and Rashid (2022) with the aim to explore the association of burnout with social factors. They collected data from 195 therapists from both the private and government sectors. After analysis, they found that male physical therapists are at high risk of developing burnout syndrome. Huseyin and his colleagues conducted research in Istanbul with the aim of comparing burnout levels before and after the COVID-19 pandemic among medical staff. It was a

crosssectional study with 412 number of participants from three different hospitals. They found that after the pandemic the staff that worked extra hours in residency and performed night shifts reported more emotional exhaustion and depersonalization as compared to the other group. So, this study concluded that chronic workplace stressors lead to an increase in burnout (Küçükali et al., 2022).

This is because individuals having more positive attitudes toward themselves are more likely to face life adversities and difficulties in a more competent and adequate style. They are more likely to give themselves positive feedback and flexibility because self-compassion is a positive trait that helps an individual to deliberately find an alternative solution to problems and to be kind and caring towards self. This positive trait reduces feelings of negativity which decreases the chances of burnout.

3.2 Relationship of Psychology Safety with Burnout

In the next findings (as mentioned in Table 1) that psychological safety has shown negatively correlation with burnout which means if a person feels more psychologically secure, he will report low burnout. This result is also paralleled with the findings of previous studies. In one study by Sherf and his colleagues, they found that burnout was negatively associated with psychological safety. They described that speaking out and confidently sharing one's point of view reduces the likelihood of burnout (Sherf et al., 2021). It is also explained by the Basic Psychological Need Satisfaction theory that emphasized if our basic need for autonomy is fulfilled, a person feels psychologically secure and enjoys good psychological health. Where as a person who is deprived of this need shows emotional exhaustion and more symptoms of burnout. (Liebenberg et al.)

Psychological safety and burnout are associated with each other. A study by Dr. Naveed Ahmed explored the role of people-centered leadership and psychological safety on burnout among curbing nurses during a pandemic. They collected data from 443 nurses employed in Pakistan's civic hospital sectors. They concluded that psychological safety was negatively correlated with burnout. So, with leadership skills and good psychological safety, burnout syndrome can be reduced (Ma et al., 2021). Psychological safety and self-

compassion, are interrelated constructs and both are essential for mental well-being. A study identified the factors that were associated with the mental well-being of medical staff. He discovered that self-compassion was significantly tied to reduced levels of burnout and other stressors while an increase in self-compassion also enhances workplace management and increase psychological safety. This study explained the relationship between all three study variables of the present research (Milroy, 2022).

Moreover, psychological safety boosts the sense of security of an individual in the workplace. When a team member feels psychologically safe, he is more likely to share ideas, use his cognitive abilities, take risks without fear of being insulted or disrespected and enjoys good social support. But if he fears to share ideas, this leads to burnout.

3.3 Significant Correlation

The findings of the study have proved that there is a significant relationship exists between self-compassion, psychological safety, and burnout (as mentioned in Table 1). The results of the present study clearly manifested that self-compassion and burnout have negative relationship as an increase in self-compassion reduces the rate of burnout. Likewise, an increase in psychological safety reduces the risk of burnout. But the self-compassion and psychological safety have a positive relationship as the one increases the other also increases.

A study conducted in Iran found a positive and significant relationship between self-compassion and psychological safety. They stated that when both constructs increase, they prevent emotional exhaustion and lead to a decreased rate of burnout (Namani & Kakhki, 2019).

Table no. 1: Correlations for Study Variables (N=300)

Variables	1	2	3
Self-compassion	-		
Burnout	-.183**	-	
Psychological safety	.425**	-.119*	-

** $p < 0.01$, * $p < 0.05$

Table 1 represented the correlations among all study variables. The correlation coefficient (r) between self-compassion and burnout was $-.183$ which indicated a negative association between these two variables. The p -value is < 0.01 which means that the relationship was statistically significant. The correlation coefficient (r) between psychological safety and burnout was $.119$ which indicated a negative association between these two variables. The p -value was < 0.05 which means that the relationship was statistically significant. The correlation coefficient (r) between psychological safety and self-compassion was $.425$ which indicated a positive association between these two variables. The p -value is < 0.01 which means that the relationship was statistically significant. Hence, we can conclude that if the level of self-compassion and psychological safety increases, the level of burnout will decrease.

3.4 Gender Difference and Burnout

According to the statistical findings, there is no significant difference found between males and females in the level of burnout. In Barboza’s study, researchers found that men and women didn’t report any difference in burnout rates. As whole construct burnout rates are not significantly different in males and females (Barboza-Wilkes, 2023). These results are culturally dependent and may vary with culture.

Table no. 2: Mean, SD and T-Test of Gender Demographic variable on Burnout

Variables	<i>M</i>	<i>SD</i>	<i>t</i> (298)	<i>p</i>	Cohen’s <i>d</i>
Gender					
Males	38.50	5.65	0.45	0.647	0.05
Females	38.21	5.16			

$p > 0.05$, $df=298$

Table no. 3: Summary of Socio-demographic Variables of Health Care Professionals

Variables	N	%
Gender		
Men	150	50.0
Women	150	50.0
Age Groups		
24-33	217	72.3
34-43	45	15.0
44-53	22	7.3
54-63	16	5.3
Marital status		
Married	144	48.0
Unmarried	156	52.0
Monthly income		
10K-100K	173	57.7
110K-200K	77	25.7
Above 200K	50	16.6
Health care sector		
Private	124	41.3
Government	176	58.7
Designation		
Nursing Assistance	24	8.0
Nurse	58	19.3
Junior Doctor	145	48.3
Senior Doctor	73	24.3
Total Job Experience		
1 year – 8 years	199	66.3
9 years – 16 years	52	17.3
17 years – 24 years	25	8.3
Above 25 years	24	8.0

Note. (N=300)

Table 3 showed that an equal number of males (n=150, 50.0%) and females (n=150, 50.0%) participated in the study. It also presented the

minimum number of participants within the age range of 54-63 ($n=16$, 5.3%) and the maximum number of participants within the age range of 24-33 ($n=217$, 72.3%) whereas there were only ($n=45$, 15.0%) and ($n=22$, 7.3%) number of participants within age ranges of 34-43 and 44-53 respectively. About ($n=144$, 48.0%) participants were married and ($n=156$, 52.0%) participants were unmarried. The monthly income level of most participants fell in the first category 10K-100K ($n=173$, 57.7%), some were in the second category 110K-200K ($n=77$, 25.7%) and the least was in the third category above 200K ($n=50$, 16.6%). The participants from the government healthcare sector ($n=176$, 58.7%) were higher than those from the private healthcare sector ($n=124$, 41.3%). Out of 300 participants, ($n=145$, 48.3%) were junior doctors, ($n=73$, 24.3%) were senior doctors, ($n=58$, 19.3%) were nurses and ($n=24$, 8.0%) were nursing assistants. The highest number of participants had a total job experience of 1 year – 8 years ($n=199$, 66.3%) while ($n=52$, 17.3%) had a total job experience of 9 years – 16 years, ($n=25$, 8.3%) had a total job experience of 17 years – 24 years, and ($n=24$, 8.0%) had total job experience of above 25 years.

Table no. 4: Psychometric Properties of All Scales

Scale	<i>M</i>	<i>SD</i>	Range	Cronbach's <i>a</i>
SCSSF	38.25	5.33	12-60	0.49
OBI	38.35	5.40	16-64	0.63
NPSSG	99.11	21.65	29-145	0.95

Table 2 represented Cronbach's alpha reliability of all scales that were used in the current study. The reliability of all constructs was evaluated by using Cronbach's alpha. The results revealed that the Neuroperception Psychological Safety Scale General form (NPSSG) with 29 items had excellent *Cronbach's* reliability $\alpha = 0.95$. The Oldenburg Burnout Inventory OBI with 16 items showed good *Cronbach's* reliability $\alpha = 0.63$ whereas Self-Compassion Scale Short Form SCSSF with 12 items exhibited poor *Cronbach's* reliability $\alpha = 0.49$. The value of

alpha was low due to the number of items on the scale as according to Tavakol, the number of items affects the alpha value, if the length of the scale is short, the value of alpha can be reduced but it does not mean that items of the scale are not correlated (Tavakol & Dennick, 2011).

Table no. 5: Linear Regression Analysis of Self-compassion and psychological safety on burnout

Variable	Self compassion		Psychological safety			
	B	SE	B	B	SE	B
						-.119
Burn out	-.186			.030	-0.14	
R ²	.03	.058	-.183	.011		

Note. N=300, CI= Confidence Interval a.

Dependent Variable: Burnout

**P<0.01

Results revealed that self-compassion contributes 3% to be significant predictor of PPC ($\Delta R^2 = .03$, $p < 0.01$) and psychological safety contributes 1% to be significant predictor of burnout ($\Delta R^2 = .011$, $p > 0.01$).

4. CONCLUSION

On the basis of theoretical explanation, statistical results and discussion, the conclusion magnificently précises the purpose and findings of the current research. This research illustrates the role of self-compassion and psychological safety on the burnout of medical staff in Sialkot, Pakistan. As aligned with recent research, the SC and PS are correlated and positively affected each other while the SC and PS with BO are negatively correlated.

5. LIMITATIONS OF THE STUDY AND RECOMMENDATIONS

Likewise other social science research, this study has its own limitations. Participants were drawn from one city only i.e., Sialkot. So, the sample does not have much diversity and results cannot be generalized to the whole medical community of the country. Secondly, the data was only collected

from urban hospitals. The rural hospitals were not approached due to the limited time span. Due to the English language, nurses and nursing assistants faced difficulty in understanding the statements.

It is recommended to collect the data from different cities of Pakistan to increase the generalizability of the study. Scales should be used in the native language so that they will be better understood by the sample. In addition to urban hospitals, hospitals from rural areas should also be approached. These variables should also be studied in populations other than medical staff. Moreover, self-compassion construct should also be studied as a mediator in future research.

REFERENCES

- Abbas Abdollahi, A. T. (2020). Perceived stress, self-compassion and job burnout in nurses: the moderating role of self-compassion. *Journal of Research in Nursing*, 26(3).
- Ali, S., & Rashid, I. (2022). Association Of Burnout Syndrome with Social Factors in Physical Therapists. *Era of Physiotherapy and Rehabilitation Journal*, 1(2)
- Bano, D. S., Mubashir, A., Aijaz, U., Hayat, A., & Hakeem, S. (2023). Organizational Cease Of Healthcare Workers In Pakistan Investigating Covid & Post Covid Effects Of Work-Family Conflict, Lack Of Appraisal And Job Demand. *Journal of Positive School Psychology*, 7(1), 1285–1310. <https://journalppw.com/index.php/jpsp/article/view/15437>
- Brown, C. A., & Pashniak, L. M. (2018). Psychological health and occupational therapists: Burnout, engagement and work addiction. *Work*, 60(4), 513–525. <https://doi.org/10.3233/wor-182759>
- Cynthia J Barboza-Wilkes, T. V. (2023). Deconstructing Burnout at the Intersections of Race, Gender, and Generation in Local Government. *Journal of Public Administration Research and Theory*, 33(1), 186–201. <https://doi.org/10.1093/jopart/muac018>
- Croston, M., & Rutter, S. (2023). Becoming an inner ally: the compassionate minds approach to self compassion – an online programme. *British*

Journal of Nursing, 32(1), S20–S23. <https://doi.org/10.12968/bjon.2023.32.1.s20>

Demerouti, E., & Nachreiner, F. (2001). Zur Spezifität von Burnout für Dienstleistungsberufe: Fakt oder Artefakt [The specificity of burnout for human services: Fact or artefact]. *Zeitschrift für Arbeitswissenschaft*, 52, 82–89. Dreison, K. C., Luther, L., Bonfils, K. A., Sliter, M. T., McGrew, J. H., & Salyers, M. P. (2018). Job burnout in mental health providers: A meta-analysis of

35 years of intervention research. *Journal of Occupational Health Psychology*, 23(1), 18–30. <https://doi.org/10.1037/ocp0000047>

Daldoul, A., W. Khechin, W. Krir, Faten Ezzairi, H. El Kefi, Zaied, S., & Ahmed, S. (2021). Burnout among health care professionals in medical oncology in tunisia. 64(S1), S431–S431. <https://doi.org/10.1192/j.eurpsy.2021.1150>

E. Namani, M. B. (2019). Mediating Role of Psychological Security in the Relationship between Optimism and Self-Compassion with Psychological Well-Being in Veterans' Spouses. *Iran Journal of War and Public Health*, 11(5), 101-108

Elad N. Sherf, M. R. (2021). Distinguishing Voice and Silence at Work: Unique Relationships with Perceived Impact, Psychological Safety, and Burnout. *Academy of Management Journal*, 64(1). <https://doi.org/10.5465/amj.2018.1428>

Frazier, M. L., Fainshmidt, S., Klinger, R. L., Pezeshkan, A., & Vracheva, V. (2017). Psychological Safety: A Meta-Analytic Review and Extension. *Personnel Psychology*, 70(1), 113–165. <https://doi.org/10.1111/peps.12183>

Hashem, Z., & Zeinoun, P. (2020). Self-Compassion Explains Less Burnout Among Healthcare Professionals. *Mindfulness*, 11(11), 2542–2551. <https://doi.org/10.1007/s12671-020-01469-5>

Haldorai, K., Kim, W. G., Agmapisarn, C., & Li, J. (Justin). (2023). Fear of COVID19 and employee mental health in quarantine hotels: The role of selfcompassion and psychological resilience at work. *International Journal of Hospitality Management*, 111, 103491. <https://doi.org/10.1016/j.ijhm.2023.103491>

- Küçükali H., Hayran, O., Ankarali, Z. C., Cengiz C., Karakaya, R. N., & Yüce, F. Z. (2022). Medical residents are facing burnout, who are at stake? A crosssectional study in three university hospitals in Istanbul. *Journal of Basic and Clinical Health Sciences*, 6(2), 393–400.
- Kratzke, I. M., Barnhill, J. L., Putnam, K. T., Rao, S., Meyers, M. O., Meltzer-Brody, S., Farrell, T. M., & Bluth, K. (2022). Self-compassion training to improve well-being for surgical residents. *EXPLORE*. <https://doi.org/10.1016/j.explore.2022.04.008>
- Liebenberg, Jo-Mari, et al. "The Daily Basic Psychological Need Satisfaction and Work Engagement of Nurses: A "Shortitudinal" Diary Study." *Healthcare*, vol. 10, no. 5, 6 May 2022, p. 863, <https://doi.org/10.3390/healthcare10050863>.
- Ma, Y., Faraz, N. A., Ahmed, F., Iqbal, M. K., Saeed, U., Mughal, M. F., & Raza, A. (2021). Curbing nurses' burnout during COVID-19: The roles of servant leadership and psychological safety. *Journal of Nursing Management*, 29(8). <https://doi.org/10.1111/jonm.13414>
- Milroy, C. (2022). Factors associated with the mental wellbeing of medical professionals. *Eprints.lancs.ac.uk*. <https://eprints.lancs.ac.uk/id/eprint/177400/>
- Morton, L., Cogan, N., Kolacz, J., Calderwood, C., Nikolic, M., Bacon, T., Pathe, E., Williams, D., & Porges, S. W. (2022). A new measure of feeling safe: Developing psychometric properties of the Neuroception of Psychological Safety Scale (NPSS). *Psychological Trauma: Theory, Research, Practice, and Policy*. <https://doi.org/10.1037/tra0001313>
- Martínez-Rubio, D., Colomer-Carbonell, A., Sanabria-Mazo, J. P., Pérez-Aranda, A., Navarrete, J., Martínez-Brotóns, C., Escamilla, C., Muro, A., MonteroMarín, J., Luciano, J. V., & Feliu-Soler, A. (2023). How mindfulness, selfcompassion, and experiential avoidance are related to perceived stress in a sample of university students. *PLOS ONE*, 18(2), e0280791. <https://doi.org/10.1371/journal.pone.0280791>

- Ma, Y., Faraz, N. A., Ahmed, F., Iqbal, M. K., Saeed, U., Mughal, M. F., & Raza, A. (2021). Curbing nurses burnout during COVID-19: The roles of servant leadership and psychological safety. *Journal of Nursing Management*, 29(8). <https://doi.org/10.1111/jonm.13414>
- Neff, K. D., & Dahm, K. A. (2015). Self-Compassion: What It Is, What It Does, and How It Relates to Mindfulness. *Handbook of Mindfulness and SelfRegulation*, 121–137. https://doi.org/10.1007/978-1-4939-2263-5_10
- Prapanjaroensin, A., Patrician, P. A., & Vance, D. E. (2017). Conservation of resources theory in nurse burnout and patient safety. *Journal of Advanced Nursing*, 73(11), 2558–2565. <https://doi.org/10.1111/jan.13348>
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the Self-Compassion Scale. *Clinical Psychology & Psychotherapy*. 18, 250-255.
- Razzetti, G. (2021). It's Time to Accept that Burnout at the Workplace Is Not a Virus | By Gustavo Razzetti. *Fearlessculture.design*. <https://www.fearlessculture.design/blog-posts/why-burnout-at-the-workplace-requires-psychological-safety>
- Tavakol, M., & Dennick, R. (2011). Making Sense of cronbach's Alpha. *International Journal of Medical Education*, 2(2), 53–55. <https://doi.org/10.5116/ijme.4dfb.8dfd>
- Timofeiov-Tudose, I.-G., & Măirean, C. (2022). Workplace humour, compassion, and professional quality of life among medical staff. *European Journal of Psychotraumatology*, 14(1). <https://doi.org/10.1080/20008066.2022.2158533>
- Vaillancourt, Elise S., and Louise Wasylkiw. "The Intermediary Role of Burnout in the Relationship between Self-Compassion and Job Satisfaction among Nurses." *Canadian Journal of Nursing Research*, vol. 52, no. 4, 26 Apr. 2019, p. 084456211984627 <https://doi.org/10.1177/0844562119846274>.

- Vakira, E., Shereni, N. C., Ncube, C. M., & Ndlovu, N. (2022). The effect of inclusive leadership on employee engagement, mediated by psychological safety in the hospitality industry. *Journal of Hospitality and Tourism Insights*. <https://doi.org/10.1108/jhti-09-2021-0261>
- Vevoda, Jiri & Vévodová, Šárka & Nakladalová, Marie & Grygová, Bronislava & Kisvetrová, Helena & Niedworok, E. & Chrastina, Jan & Svobodová, Dita & Králová, Petra & Merz, Lukas. (2016). The relationship between psychological safety and burnout among nurses. *Pracovní lékařství*. 68. 40-46.
- Waite, J. M. (2023). How an Undergraduate Nursing Curriculum Influenced My Understanding and Attitude of Self-Compassion. Queen's University (Canada) ProQuest Dissertations.
- Yu, M., Qin, W., & Li, J. (2022). The influence of psychosocial safety climate on miners' safety behavior: A cross-level research. *Safety Science*, 150, 105719. <https://doi.org/10.1016/j.ssci.2022.105719>
- Yıldırım, M., & Ashraf, F. (2023). Fear of COVID-19, Coronavirus Anxiety, COVID19 Burnout, and Resilience: Examining Psychometric Properties of COVID-19 Burnout Scale in Urdu. *Journal of Asian and African Studies*, 002190962311531. <https://doi.org/10.1177/00219096231153161>