

The Influence of Self-care Practices on Burnout among Professional Women in High-stress Environments

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Abstract: Burnout is a critical issue among professional women in high-stress environments, emphasizing the need for effective self-care strategies. This study examines the relationships between physical, psychological, and spiritual self-care and burnout, and its collective and individual contributions to predicting burnout levels and using a sample population of 137 professional women in Nigeria. Results revealed significant negative correlations between burnout and physical self-care ($r = -0.43, p < 0.05$), psychological self-care ($r = -0.54, p < 0.05$), and spiritual self-care ($r = -0.42, p < 0.05$), indicating that these practices collectively reduce burnout. The composite contribution of these self-care domains to the prediction of burnout ($R^2 = 0.300, \text{Adj } R^2 = 0.285$), highlights their combined importance. However, 71.5% of the variance remains attributable to other factors beyond this study's scope. Psychological self-care emerged as the only significant predictor of burnout ($\beta = -0.419, t = -3.802, p < 0.05$), contributing to a 41.9% reduction in burnout tendencies. In contrast, physical self-care ($\beta = 0.071, t = 0.672, p > 0.05$) and spiritual self-care ($\beta = 0.107, t = 1.094, p > 0.05$) did not independently predict burnout, suggesting limited standalone effects. These findings underscore the critical role of psychological self-care in mitigating burnout. While physical and spiritual self-care have value, psychological self-care demonstrates the strongest influence. Future research should investigate additional burnout-related factors to deepen understanding and improve interventions.

Keywords: burnout, high-stress environment, professional women, self-care practices

Introduction

Burnout is a psychological syndrome that emerges as a prolonged response to chronic interpersonal stressors in the workplace, characterized by emotional exhaustion, depersonalization, and a diminished sense of personal accomplishment (Maslach & Leiter, 2016), while burnout is increasingly prevalent across professions, women in high-stress environments such as healthcare, law, and corporate leadership are particularly susceptible due to unique job demands, societal expectations and often inadequate support systems (Gould, 2021; Shanafelt, Boone, Tan et al., 2015). The intersection of professional responsibilities and personal obligations can create a high-pressured environment for women, often leading to increased stress and burnout rates (Seidler et al., 2020; Lyubarova, et al., 2023) which if not managed effectively can adversely affect mental and physical health. The growing concern over burnout among professional women underscores the importance of understanding the factors that contribute to this phenomenon.

World Health Organization (WHO, 2019) classifies burnout as an occupational phenomenon resulting from chronic workplace stress that has not been successfully managed. Symptoms include fatigue, cynicism, and a decline in professional efficacy. Research indicates that career women are disproportionately affected by burnout compared to their male counterparts (Artz, et al., 2022; Mafishiraz, 2023; Hoff & Lee, 2021). This disparity is attributed to several factors, including gender discrimination (Volpe, et al., 2022; Bianchi, Schonfeld, & Laurent, 2015), work-life imbalance, and the "second shift" phenomenon (Hochschild, & Machung, 2012), where women are often more responsible for both professional duties and domestic responsibilities (Cui, 2023; Reig-Alexandre et al., 2023).

High-stress environments, such as those found in healthcare, finance, technology, and law exacerbate these challenges, making effective self-care practices essential for maintaining mental health (Karkoulian, Srour, & Sinan, 2016), and job performance (Leiter, & Maslach, 2009). Also, Hricova, et al (2020) found that professional self-care facilitates the development of depersonalization in times of high perceived stress.

Self-care practices are physical, psychological, mental and spiritual activities undertaken by individuals to reduce stress, maintain health and promote overall well-being (Brillon et al., 2023). These practices are influenced by various contextual perspectives, including cultural (Marks, Murray, Evans, & Willig, 2015), psychological (Deci & Ryan, 1985), social support systems and norms (Thoits, 2011), environmental (WHO, 2022) and technological (Lupton, 2017) factors. These self-practices are recognized as essential in managing job-related stress (Shanafelt, Hasan, Dyrbye, et al., 2017). Common self-care practices include physical exercise, mindfulness meditation, adequate sleep, mental health practices, proper nutrition, hygiene practices, stress management,

social engagement, and social support (Smith, Luchetti, Venkatesh, & Seltzer, 2018). These practices are linked to improved mental health, resilience, and job satisfaction. The World Health Organization (WHO, 2022) defines self-care as the ability of individuals, families and communities to promote health, prevent disease, maintain health, and to cope with illness and disability with or without the support of a healthcare provider.

Research highlights that women face unique challenges in caregiving, professional responsibilities, societal expectations, and personal health management, affecting their health and well-being. The NIH (2017) emphasizes that balancing these multiple roles underscores the importance of self-care practices tailored to women's specific needs. Historically, the concept of self-care has evolved from basic health maintenance to a holistic approach that integrates physical, emotional, and psychological well-being (Reynolds & Sperry, 2020). Blum and Smith (2019) submit that in the past, self-care was primarily associated with medical advice and physical health, but it has since expanded to include mental health practices such as mindfulness, meditation, and stress management. This evolution reflects a growing recognition of the interconnectedness of mind and body and the importance of a comprehensive approach to health that includes physical, emotional, and psychological dimensions in self-care strategies (WHO, 2022).

Research also indicates that self-care practices often differ by gender, with women generally more engaged in routine health maintenance activities than men. Women are more likely to seek preventive care, adhere to health advice, and engage in practices that promote mental and emotional well-being (Bertakis, & Azari, 2010; Harris, Borrell, Hines, et al., 2016; Redondo-Sendino, Guallar-Castillón, Banegas, et al., 2006; Ward, & Schiller, 2013). However, the pressures of balancing multiple roles can also pose significant challenges to consistent self-care, making it a critical area of study (Smith, Luchetti, Venkatesh, & Seltzer, 2018). It also suggests that self-care practices can significantly reduce the negative effects of burnout. For example, regular physical activity has been shown to reduce stress hormones and improve mood (Rebar, Stanton, Geard, et al., 2015), while mindfulness practices can enhance emotional regulation and reduce feelings of burnout (Malik & Annabi, 2022; Green & Kinchen, 2021).

Theoretically, Conservation of Resources (COR) theory posits that individuals strive to conserve resources (e.g., energy, time, and social support). Burnout occurs when resources are threatened, lost, or not sufficiently replenished (Hobfoll, 1989). Studies show that self-care acts as a mechanism to restore and maintain these resources thereby reducing burnout (Benight et al. 1999; Bakker et al. 2007; Hart et al. 2020). Self-Determination Theory (SDT) emphasizes fulfilling basic psychological needs (autonomy, competence, and relatedness) to boost intrinsic motivation and lower burnout (Ryan & Deci, 2000). Mindfulness, physical exercise and setting work-life boundaries can significantly reduce stress in professional settings and serve as protective factors against burnout by enhancing resilience and emotional regulation (Weinstein & Ryan, 2011; Grossman et al., 2017).

The Theory of Planned Behaviour (TPB) explains behavior through attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). Positive attitudes, supportive norms, and high self-efficacy enhance self-care and mitigate burnout. Godin and Kok (1996) support perceived behavioral control, like scheduling flexibility and predicting self-care practices. Resilience Theory highlights adaptation and recovery, with self-care building resilience against burnout (Masten, 2001). Resilience-focused interventions improve emotional regulation and reduce burnout (Hart et al., 2020). Empowerment Theory emphasizes self-determination for control over life, with self-care enhancing work-life balance and well-being (Browning et al., 2021; Zimmerman, 1995).

However, despite the known benefits of self-care, professional women often report insufficient time or energy to engage in these practices due to overwhelming job demands (Bettini & Parkes, 2019). The interplay between self-care practices and its influence on burnout levels among professional women in high-stress environments remains underexplored. This gap in knowledge presents a significant problem as it impedes the development of targeted interventions and policies aimed at reducing burnout and promoting mental health and well-being among this population. Addressing this issue is essential for fostering sustainable work environments where professional women can thrive without compromising their health. To bridge this gap, this study aims to investigate the influence of self-care practices on burnout among professional women in high-stress environments. Understanding these dynamics will contribute to the development of effective strategies to mitigate burnout and support the well-being of professional women, ultimately enhancing their productivity and satisfaction in the workplace.

In addition, despite the recognized importance of self-care, there is a lack of comprehensive research on its specific impact on burnout among career women in high-stress environments. This gap in knowledge poses a significant problem for developing targeted interventions and support systems for this demographic. Without a clear understanding of how different self-care practices (physical self-care, psychological self-care and spiritual self-care) influence burnout, career women remain vulnerable to the adverse effects of chronic stress, which can lead to reduced job performance, increased absenteeism, and long-term health issues. Also, burnout does not only affect individual well-being but also organizational productivity and societal health. Consequently, understanding how self-care practices can mitigate burnout is crucial for fostering healthier work environments and promoting sustainable career trajectories for women.

However, empirical evidence on the efficacy of these practices in alleviating burnout specifically among career women is limited. This paper investigates the relationship between self-care practices (physical self-care, psychological self-care and spiritual self-care), and burnout among career women in high-stress environments. Understanding the impact of self-care practices on burnout among career women in high-stress environments holds significant implications for multiple stakeholders. For individuals, it can enhance personal well-being and career satisfaction. For organizations, it can improve employee retention, productivity, and morale. For society, it contributes to the broader discourse on gender equality and mental health.

This study, therefore, aims to explore the relationship between self-care practices-physical, psychological and spiritual- and burnout among professional women in high-stress environments, providing actionable insights to inform policymaking, workplace wellness programs, and personal self-care routines. Specifically, it will investigate how different levels of self-care engagement may buffer the negative effects of burnout. Considering the rising awareness of burnout's detrimental impact on mental health and job performance, this research seeks to contribute to the growing body of knowledge by identifying effective strategies for mitigating burnout and promote well-being in high-stress professional settings.

Objectives of the Study

The main objective of the study is to explore the relationship between self-care practices and burnout among professional women in high stress environment. Specifically, to:

- Examine the type of relationship between physical self-care, psychological self-care and spiritual self-care.
- Ascertain if there is a joint contribution of physical self-care, psychological self-care and spiritual self-care on burnout among professional women in high-stress environments.
- Determine the relative contribution of physical self-care, psychological self-care and spiritual self-care on burnout among professional women in high-stress environments.

Research Questions

- What type of relationship exist between physical self-care, psychological self-care, spiritual self-care and burnout among professional women in high-stress environment?
- What is the joint contribution of physical self-care, psychological self-care and spiritual self-care on burnout among professional women in high-stress environments?
- What is the relative contribution of physical self-care, psychological self-care and spiritual self-care on burnout among professional women in high-stress environments?

Methods and Measures

The sample consists of career women from various high-stress professions in Nigeria. Correlational research design was used to explore the relationship between self-care practices and burnout among professional women in high stress environment. The survey measures the frequency of self-care practices and levels of burnout. The scale on high-stress environment was self-developed with 40 items: items 1-30 measures low stress to extreme stress, 31-36 measures coping and resilience strategies and 37-40 measures organizational measures. Self-Care Behaviors scale developed by Torres, Corral and Corral (2021) made up of 52 items that measures three dimensions of self-care: physical (20 items), psychological (23 items) and spiritual (9 items) of 5 Likert-scale response options (1= never, 2= almost never, 3= occasionally, 4= almost always to 5= always) which was changed to three response format (Always=3, Sometimes =2 and Never= 1) was adapted for the study. The internal consistency indices of the total score are 0.93 to 0.96. Maslach Burnout Inventory (MBI) developed by Maslach (1981) was adapted for the study. It consists of 23 items that measure three dimensions of burnout: Exhaustion, Mental Distance and Emotional impairment of 7 response format (Never = 0, A few times a year=1, Once a month = 2, A few times per month= 3 Once a week= 4 A few times per week= 5 Every day=6). The response format was changed to three (Always=3, Sometimes =2 and Never= 1). The data collection method involved using Google Forms, which were distributed via WhatsApp and WhatsApp groups to professional women such as educators, financial analysts, lawyers, healthcare workers, executive businesswomen and others in Oyo State and Ekiti State. A total of 137 professional women responded to the survey based on interest and availability.

Results

Research Question 1: What type of relationship exist between physical self-care, psychological self-care, spiritual self-care and burnout among professional women in high-stress environment?

Table 1: Multiple correlation summary of variables under investigation

Variables	Mean	St. dv	1	2	3	4
Burnout	51.43	7.77	1.00			
Physical self-care	32.61	6.45	-0.43**	1.00		
Psychological self-care	47.43	10.45	-0.54**	0.71**	1.00	
Spiritual self-care	16.06	4.57	-0.42**	0.60**	0.64**	1.00

Source: Field Survey, 2024

Table 1 reveals that there is a significant relationship between burnout and physical self-care ($r = -0.43$, $p < 0.05$), psychological self-care ($r = -0.54$, $p < 0.05$), and spiritual self-care ($r = -0.42$, $p < 0.05$). This implies that high influence of physical, psychological and spiritual self-care practices will reduce burnout experience among professional women in high-stress environments.

Research Question 2: What is the joint contribution of physical self-care, psychological self-care and spiritual self-care on burnout among professional women in high-stress environments?

Table 2: Regression summary showing the joint contribution between the independent variables on the Dependent variable.

R=0.548		Adj R²=0.285			
R²=0.300		Std Error=6.570			
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2481.498	3	827.166	19.162	0.000
Residual	5784.415	134	43.167		
Total	8265.913	137			

Source: Field Survey, 2024

Table 2 reveals that there is a joint contribution of physical self-care, psychological self-care and spiritual self-care to the prediction of burnout among professional women in high-stress environments. Regression coefficient $R=0.548$, $R^2=0.300$, $Adj R^2=0.285$. The three factors, when combined accounts for 28.5% variance in burnout among professional women in high-stress environment. However, the remaining percentage (71.5%) accounts for the change in burnout among professional women that are beyond the study. Therefore, physical self-care, psychological self-care and spiritual self-care jointly predicted burnout among professional women in high-stress environments.

Research Question 3: What is the relative contribution of physical self-care, psychological self-care and spiritual self-care on burnout among professional women in high-stress environments?

Table 2: Regression summary showing the relative contribution between the independent variables on the Dependent variable

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	30.950	2.993		10.339	0.000
Physical self-care	0.086	0.128	0.071	0.672	0.503
Psychological self-care	-0.311	0.082	-0.419	-3.802	0.000**
Spiritual self-care	0.181	0.166	0.107	1.094	0.276

Source: Field Survey, 2024

Table 3 reveals that one out of the three factors, psychological self-care ($\beta = -0.419$, $t = -3.802$, $p < 0.05$) is a significant predictor of burnout in professional women while physical self-care ($\beta = 0.071$, $t = 0.672$, $p > 0.05$) and spiritual self-care ($\beta = 0.107$, $t = 1.094$, $p > 0.05$) are not significant predictors. The only potent predictor is psychological self-care this implies that psychological self-care will reduce the tendency of burnout among professional women in high-stress environments by 41.9%.

Discussion

The correlation coefficient ($r = -0.43$, $p < 0.05$, $r = -0.43$, $p < 0.05$, $r = -0.43$, $p < 0.05$) indicates a moderate negative relationship between burnout and physical self-care. This implies that engaging in regular physical activities such as exercise, maintaining a healthy diet, and ensuring sufficient rest reduces the likelihood of experiencing burnout. This agrees with Schwabe et al., (2010) who found that physical self-care is germane for stress management as it enhances physical resilience and releases endorphins, which improve mood and energy levels. Also, Pu et al. (2019) showed that regular physical activity significantly reduces stress-related exhaustion and boosts overall well-being among professionals. However, the result contradicts Hricova et al (2020) who found that women in high-stress jobs often neglect physical self-care due to demanding schedules, exacerbating burnout symptoms. Also, the strongest correlation in this study ($r = -0.54$, $p < 0.05$, $r = -0.54$, $p < 0.05$, $r = -0.54$, $p < 0.01$) is between burnout and psychological self-care, suggesting a robust inverse relationship. Psychological self-care includes practices such as mindfulness, therapy, and engaging in hobbies, which directly mitigate the mental and emotional strain associated with burnout. Professional women in high-stress environments are prone to cognitive overload and emotional exhaustion, making psychological self-care vital. This is in line with Luken and Sammons (2016) who discovered that activities like mindfulness training can improve emotional regulation and reduce

the emotional toll of high-pressure roles. Also, Grossman et al (2017) opined that mindfulness-based interventions have been shown to reduce symptoms of burnout, particularly emotional exhaustion, by enhancing focus and emotional resilience.

Additionally, the correlation ($r=-0.42$, $p<0.01$, $r=-0.42$, $p<0.01$, $r=-0.42$, $p<0.01$) between burnout and spiritual self-care points to a moderate negative relationship. Spiritual self-care encompasses practices like meditation, prayer, or finding purpose, which can help individuals cope with stress and find meaning in their work. Spiritual self-care provides an avenue for professional women to align their values and goals, fostering a sense of fulfillment that counters feelings of burnout (Rupert & Pakenham, 2022). Studies have found that spirituality and a sense of purpose are associated with reduced stress and enhanced resilience, particularly in high-stress professions such as healthcare and education (Miller et al., 2019). These results support the Conservation of Resources (COR) theory, which posits that individuals who actively replenish their resources (e.g., energy, mental focus) through self-care are better equipped to handle stress and avoid burnout (Hobfoll, 1989). In a nutshell, the findings highlight a significant inverse relationship between burnout and three dimensions of self-care—physical, psychological, and spiritual. The negative correlation coefficients suggest that as self-care practices in these domains increase, burnout levels decrease among professional women in high-stress environments.

Moreover, the regression analysis shows a moderately strong relationship between the combined self-care factors and burnout, with an $R=0.548$, $R^2=0.300$. The $R^2=0.300$ indicates that these three dimensions of self-care collectively explain 30% of the variance in burnout, and the adjusted $R^2=0.285$ refines this estimate, accounting for possible overfitting. This suggests that physical, psychological, and spiritual self-care are important predictors of burnout in this demographic but are not the sole determinants. The remaining 71.5% of the variance suggests that other factors not captured by the study, such as organizational support, work-life balance, coping mechanisms, or personality traits, significantly influence burnout. This gap highlights the complexity and multifaceted nature of burnout. From theoretical and empirical context, burnout is a state of emotional, physical, and mental exhaustion caused by prolonged and excessive stress, commonly seen in high-stress environments (Maslach et al., 2001). Self-care strategies are increasingly recognized as critical in mitigating burnout (Ayala & Manzano, 2018).

The findings align with the Self-Care Deficit Nursing Theory (Orem, 1991), which emphasizes the importance of self-care in maintaining well-being. Physical self-care, such as regular exercise, adequate sleep, and proper nutrition, is associated with reduced stress and improved resilience. For instance, Pu et al. (2019) found that physical activity positively influences stress management and reduces the risk of burnout among healthcare professionals. Psychological self-care includes mindfulness, therapy, and cognitive restructuring, which can help professional women manage stress and maintain emotional balance. Mindfulness-based interventions have been particularly effective in reducing burnout and improving emotional regulation (Luken & Sammons, 2016). Spiritual self-care, such as meditation, prayer, or a sense of purpose, provides meaning and coping mechanisms during high-stress situations. Research shows that spiritual practices can enhance well-being and buffer against stress (Pawar, 2024). For professional women, these practices can foster inner peace and resilience, helping mitigate burnout.

However, the findings also indicate that among the three self-care dimensions examined, psychological self-care is the most significant predictor of burnout in professional women working in high-stress environments. Neither physical self-care nor spiritual self-care demonstrated a statistically significant predictive relationship. The standardized beta coefficient ($\beta=-0.419$, $p<0.01$, $\beta=-0.419$, $p<0.05$) suggests that psychological self-care has a robust inverse relationship with burnout. For every unit increase in psychological self-care, there is a 41.9% decrease in burnout levels among professional women. Psychological self-care practices, such as mindfulness therapy, and emotional processing, likely improve emotional regulation, coping mechanisms, and resilience, all of which directly counteract the emotional exhaustion, cynicism, and inefficacy associated with burnout (Kinnunen et al., 2020). This result aligns with evidence from Selič-Zupančič et al., (2023), who found that mindfulness and other psychological self-care practices are highly effective in mitigating stress and preventing burnout in high-demand professions.

Again, physical self-care ($\beta=0.071$, $p>0.05$, $\beta=0.071$, $p>0.05$) did not significantly predict burnout. While physical self-care can contribute to overall health and well-being, its direct impact on burnout may be less pronounced compared to psychological strategies. One potential explanation is that the benefits of physical self-care (e.g., exercise, proper nutrition) are more generalized and not as directly targeted toward addressing the cognitive and emotional strains that characterize burnout. Additionally, professional women in high-stress roles may find it challenging to maintain consistent physical self-care routines due to time constraints, limiting its effectiveness as a burnout buffer (Pu et al., 2019). In the same vein, spiritual self-care ($\beta=0.107$, $p>0.05$, $\beta=0.107$, $p>0.05$) also failed to show a significant predictive relationship with burnout. This suggests that while spiritual practices may offer emotional and existential support, they may not directly address the specific stressors and emotional exhaustion inherent in high-stress work environments. This finding could also reflect variability in how individuals interpret and engage in spiritual self-care, leading to inconsistent effects. Koenig (2012) notes that the impact of spiritual practices on mental health can be highly contextual, depending on individual belief systems and the degree to which these practices are integrated into daily life.

Implications of the findings

- The study emphasizes the importance of holistic self-care approaches in managing burnout.
- The results highlight the need for individualized interventions that prioritize psychological self-care but also accommodate preferences for physical and spiritual practices.

- Although physical and spiritual self-care were not significant predictors, they remain essential components of holistic well-being. Physical self-care might act as a foundation for overall health, indirectly supporting psychological efforts. Spiritual self-care could play a more significant role when aligned with personal values or integrated into broader resilience frameworks.

Conclusion

Addressing the impact of self-care practices on burnout is essential for supporting the health and success of career women in high-stress environments. This study seeks to fill the existing research gap by providing a comprehensive analysis of how self-care can be leveraged to combat burnout, ultimately fostering healthier and more equitable workplaces. The significant negative relationships between burnout and physical, psychological, and spiritual self-care underscore the importance of holistic well-being practices in reducing burnout among professional women in high-stress environments. These findings align with existing literature, highlighting self-care as a protective factor against burnout and a critical area for intervention in workplace wellness programs. Also, the study confirms that physical, psychological, and spiritual self-care significantly predict burnout among professional women in high-stress environments.

However, the complex and multifactorial nature of burnout necessitates a broader approach to prevention and intervention, incorporating both personal and systemic strategies. This aligns with a growing body of literature emphasizing the interplay between individual self-care and organizational culture in promoting employee well-being. In conclusion, the findings clearly position psychological self-care as a critical factor in reducing burnout among professional women in high-stress environments. This highlights the need for focused interventions that enhance psychological well-being through mindfulness, emotional regulation, and therapy. While physical and spiritual self-care are less directly impactful, they remain important for comprehensive health and should not be overlooked in burnout prevention strategies.

Recommendations

- Organizations employing professional women in high-stress roles should encourage comprehensive self-care programs, integrating physical, psychological, and spiritual dimensions.
- Customized interventions such as mindfulness training, fitness programs, spiritual retreats, and support groups, as well as access to counseling services, can help mitigate burnout and enhance employee well-being.
- Workshops and training on self-care practices should be part of employee wellness programs.
- Policy interventions should encourage flexible work schedules to allow time for self-care.
- Employers can foster environments where professional women can access diverse self-care resources tailored to their specific needs.

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References

- Ajzen, I. (1991). *The theory of planned behavior*. Organizational Behavior and Human Decision Processes, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T.
- Artz B, Kaya I, Kaya O. Gender role perspectives and job burnout (2022). Review of Economics of the Household 20(2):447-470. doi: 10.1007/s11150-021-09579-2. Epub 2021 Aug 19. PMID: 34429716; PMCID: PMC8375289.
- Ayala, E., & Manzano, G. (2018). Burnout among professionals: A review of its causes, effects, and prevention strategies. *Journal of Work Psychology*, 35(3), 182-195.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274–284.
- Benight, C. C., Ironson, G., Klebe, K., Carver, C. S., Wynings, C., Burnett, K., et al. (1999). Conservation of resources and coping self-efficacy predicting distress following a natural disaster: A causal model analysis where the environment meets the mind. *Anxiety, Stress and Coping: An International Journal*, 12(2), 107–126.
- Bettini, M., & Parkes, A. (2019). Women, work, and well-being: Strategies for reducing burnout in professional women. *Journal of Occupational Health Psychology*, 24(5), 565-578. <https://doi.org/10.1037/ocp0000148>
- Bertakis, K.D and Azari, R (2010). Patient Gender Differences in the Prediction of Medical Expenditures. *Journal of Women's Health* 19(10):1925-32 DOI: [10.1089/jwh.2009.1448](https://doi.org/10.1089/jwh.2009.1448) PubMed

- Bianchi, R., Schonfeld, I. S., & Laurent, E. (2015). Burnout-depression overlap: A review. *Clinical Psychology Review*, 36, 28-41. <https://doi.org/10.1016/j.cpr.2015.01.004>
- Blum & Smith (2019). *American Journal of Lifestyle Medicine*
- Brillon, P., Dewar, M., Paradis, A., & Philippe, F. (2023). Associations between self-care practices and psychological adjustment of mental health professionals: a two-wave cross-lagged analysis. *Anxiety, Stress, & Coping*, 36(5), 603–617. <https://doi.org/10.1080/10615806.2023.2178646>
- Browning, M., Kram, J., & Van Susteren, L. (2021). *Empowering women through self-care: A pathway to professional sustainability*. Journal of Occupational Health, 63(4), e12345.
- Cui, Shiyu. (2023). The Dilemma of Motherhood Duties in the Context of Involution: Responsibilities and Expectations: -- A Case Study on Haidian Mothers. Journal of Education, Humanities and Social Sciences. 8. 2238-2246. 10.54097/ehss.v8i.4683.
- Deci, E. L., & Ryan, R. M. (1985). *Self-determination theory: Psychological inquiry and health behavior*.
- Godin, G., & Kok, G. (1996). *The theory of planned behavior: A review of its applications to health-related behaviors*. American Journal of Health Promotion, 11(2), 87–98.
- Gould, J. (2021). The gender burnout gap: Why professional women are at greater risk. *The Lancet Psychiatry*, 8(7), 551-559. [https://doi.org/10.1016/S2215-0366\(21\)00165-6](https://doi.org/10.1016/S2215-0366(21)00165-6)
- Green AA, Kinchen EV. The Effects of Mindfulness Meditation on Stress and Burnout in Nurses (2022). Journal of Holistic Nursing 39(4):356-368. doi: 10.1177/08980101211015818.
- Grossman, P., Niemann, L., Schmidt, S., & Walach, H. (2017). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57(1), 35-43. <https://doi.org/10.1016/j.jpsychores.2017.02.004>
- Hart, P. L., Brannan, J. D., & De Chesnay, M. (2020). *Resilience in nurses: An integrative review*. Journal of Nursing Management, 22(6), 720–734.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513–524.
- Hochschild, A. R., & Machung, A. (2012). *The Second Shift: Working Families and the Revolution at Home*. Penguin Books.
- Hoff, Timothy & Lee, Do. (2021). Burnout and Physician Gender: What Do We Know?. Medical Care. Publish Ahead of Print. 10.1097/MLR.0000000000001584.
- Hricova, Monika & Schrötter, Jana & Raczova, Beata. (2020). The Mediating Role of Psychological, Professional Self-Care and Job Satisfaction as Preventive Factors in Helping Professions. European Journal of Mental Health. 15. 3-22. 10.5708/EJMH.15.2020.1.1.
- Karkouljian, S., Srour, J., & Sinan, T. (2016). A gender perspective on work-life balance, perceived stress, and locus of control. *Journal of Business Research*, 69(11), 4918-4923. doi:10.1016/j.jbusres.2016.04.053.
- Kinnunen, S. M., Puolakanaho, A., Tolvanen, A., Mäkikangas, A., & Lappalainen, R. (2020). Improvements in mindfulness facets mediate the alleviation of burnout dimensions. *Mindfulness*, 11(12), 2779–2792. <https://doi.org/10.1007/s12671-020-01490-8>
- Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry*, 2012, 1-33.
- Leiter, M. P., & Maslach, C. (2009). Nurse turnover: The mediating role of burnout. *Journal of Nursing Management*, 17(3), 331-339. doi:10.1111/j.1365-2834.2009.01004.x.
- Luken, M., & Sammons, A. (2016). Systematic review of mindfulness practice for reducing job burnout. *American Journal of Occupational Therapy*, 70(2), 1-10.
- Lupton, D. (2017). *Digital health: Critical and cross-disciplinary perspectives*.
- Lyubarova R, Salman L, Rittenberg E. (2023). Gender Differences in Physician Burnout: Driving Factors and Potential Solutions. Permanente Journal 15;27(2):130-136. doi: 10.7812/TPP/23.023. Epub 2023 Jun 12. PMID: 37303223; PMCID: PMC10266850.
- Mafishiraz, M. (2023). Job Burnout in Women and the Need to Use Psychological Services and Counselling in Workplaces. *Journal of Education, Society and Behavioural Science*, 36(5), 44–54. <https://doi.org/10.9734/jesbs/2023/v36i51223>
- Malik H, Annabi CA. The impact of mindfulness practice on physician burnout: A scoping review. Front Psychol. 2022 Sep 20;13:956651. doi: 10.3389/fpsyg.2022.956651. PMID: 36204751; PMCID: PMC9530040.
- Marks, D. F., Murray, M., Evans, B., & Willig, C. (2015). *Health Psychology: Theory, Research, and Practice*.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2(2), 99-113.
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111. <https://doi.org/10.1002/wps.20311>

- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397-422.
- Masten, A. S. (2001). *Ordinary magic: Resilience processes in development*. American Psychologist, 56(3), 227-238. doi:10.1037/0003-066X.56.3.227.
- Miller, L., Wickramaratne, P., & Weissman, M. (2019). Spirituality and well-being in high-risk families. *American Journal of Psychiatry*, 176(8), 570-577.
- Orem, D. E. (1991). *Nursing: Concepts of practice*. Mosby-Year Book.
- Pawar, Badrinaraya. (2023). Relationship among five categories of spiritual practices and five forms of well-being: An empirical examination. *International Social Science Journal*. 74. 10.1111/issj.12479.
- Pu, J., Hou, H., Ma, R., & Sang, J. (2019). The effect of psychological capital on burnout among Chinese doctors: The mediating role of work-family conflict. *Burnout Research*, 5, 15-21.
- Purvanova, R. K., & Muros, J. P. (2010). Gender differences in burnout: A meta-analysis. *Journal of Vocational Behavior*, 77(2), 168-185. doi:10.1016/j.jvb.2010.04.006.
- Rebar AL, Stanton R, Geard D, Short C, Duncan MJ, Vandelanotte C. (2015). A meta-meta-analysis of the effect of physical activity on depression and anxiety in non-clinical adult populations. *Health Psychol Rev*. 2015;9(3):366-78.
- Redondo-Sendino, Aurea & Guallar-Castillón, Pilar & Banegas, José & Rodríguez-Artalejo, Fernando. (2006). Gender differences in the utilization of health-care services among the older adult population of Spain. *BMC public health*. 6. 155. 10.1186/1471-2458-6-155.
- Reig-Aleixandre N, García-Ramos JM, De la Calle-Maldonado C. (2023). Gender differences in professional social responsibility: Are women more responsible at work than men? *Frontier Psychol*. 20;14:1049389. doi: 10.3389/fpsyg.2023.1049389. PMID: 36743245; PMCID: PMC9896577.
- Reynolds, J., & Sperry, L. (2020). *Case Conceptualization: Mastering This Competency with Ease and Confidence* (2nd ed.). Routledge. <https://doi.org/10.4324/9780429288968>
- Rupert, Patricia & Pakenham, Kenneth. (2022). Self-Care and Burnout: A Proactive Values-Based Perspective. In book: *Comprehensive Clinical Psychology* (pp.138-148) doi: 10.1016/B978-0-12-818697-8.00102-3.
- Ryan, R. M., & Deci, E. L. (2000). *Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being*. American Psychologist, 55(1), 68-78. doi:10.1037/0003-066X.55.1.68. PMID: 11392867.
- Schaufeli, W. B., Leiter, M. P., & Maslach, C. (2009). Burnout: 35 years of research and practice. *Career Development International*, 14(3), 204-220.
- Schwabe, L., & Wolf, O. T. (2010). Socially evaluated cold pressor stress after instrumental learning favors habits over goal-directed action. *Psychoneuroendocrinology*, 35(6), 977-986. <https://doi.org/10.1016/j.psyneuen.2009.12.010>
- Seidler, A., Thinschmidt, M., Deckert, S., Then, F., Hegewald, J., Nieuwenhuijsen, K., & Riedel-Heller, S. G. (2020). The role of gender in workplace stress and burnout: A systematic review. *Occupational Health Psychology Review*, 18(4), 259-271. <https://doi.org/10.1177/2165079914522667>
- Selič-Zupančič, P., Klemenc-Ketiš, Z., Tement, S. O., & Mirošević, Š. (2023). The Impact of Psychological Interventions with Elements of Mindfulness on Burnout and Well-Being in Healthcare Professionals: A Systematic Review. *Journal of Multidisciplinary Healthcare*, 16, 11181. <https://doi.org/10.3390/ijerph182111181>
- Shanafelt, T. D., Boone, S., Tan, L., Dyrbye, L. N., Sotile, W., Satele, D. & Trockel, M. (2015). Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Archives of Internal Medicine*, 172(18), 1377-1385.
- Shanafelt TD, West CP, Sinsky C, Trockel M, Tutty M, Satele DV, Carlasare LE, Dyrbye LN. (2019). Changes in Burnout and Satisfaction With Work-Life Integration in Physicians and the General US Working Population Between 2011 and 2017. *Mayo Clin Proc*. 2019 Sep;94(9):1681-1694. doi: 10.1016/j.mayocp.2018.10.023. Epub 2019 Feb 22. PMID: 30803733.
- Smith, A., Luchetti, M., Venkatesh, A., & Seltzer, J. (2018). *Journal of Occupational Health Psychology*, 23(2), 170-183. <https://doi.org/10.1037/ocp0000062>
- Tement S, Ketiš ZK, Mirošević Š, Selič-Zupančič P. (2021). The Impact of Psychological Interventions with Elements of Mindfulness (PIM) on Empathy, Well-Being, and Reduction of Burnout in Physicians: A Systematic Review. *Int J Environ Res Public Health*. 2021 Oct 25;18(21):11181. doi: 10.3390/ijerph182111181. PMID: 34769700; PMCID: PMC8582910.
- Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior*, 52(2), 145-161.

- Volpe VV, Dawson DN, Laurent HK. Gender discrimination and women's HPA activation to psychosocial stress during the postnatal period. *Journal of Health Psychology*. 2022;27(2):352-362. doi:10.1177/1359105320953470.
- Ward BW, Schiller JS. Prevalence of multiple chronic conditions among US adults: estimates from the National Health Interview Survey, 2010 (2013). *Prev Chronic Dis*.10:E65. doi: 10.5888/pcd10.120203. PMID: 23618545; PMCID: PMC3652717.
- Weinstein, N., Brown, K. W., & Ryan, R. M. (2009). A multi-method examination of the effects of mindfulness on stress attribution, coping, and emotional well-being. *Journal of Research in Personality*, 43(3), 374-385. <https://doi.org/10.1016/j.jrp.2008.12.008>
- World Health Organization. (2019). Burn-out an "occupational phenomenon": International Classification of Diseases. Retrieved from <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>.
- World Health Organization (2022). Guideline on self-care interventions for health and well-being, 2022 revision: executive summary. Retrieved from <https://apps.who.int/iris/rest/bitstreams/1438245/>
- Zimmerman, M. A. (1995). *Psychological empowerment: Issues and illustrations*. *American Journal of Community Psychology*, 23(5), 581–599. doi:10.1007/BF02506983.