

Humanities & Social Sciences Reviews eISSN: 2395-6518, Vol 9, No 1, 2021, pp 133-141 https://doi.org/10.18510/hssr.2021.9114

BURNOUT AMONG RESIDENTS OF GENERAL SURGERY: WORK-LIFE BALANCE, SOCIAL SUPPORT, AND BURNOUT AMONG RESIDENTS OF GENERAL SURGERY

Wahida Anjum^{1*}, Sarfraz Mahmood², Zainab Qazi³, Ghulam Ishaq⁴, Abdul Qadeer⁵

^{1*}Assistant Professor, Department of Psychology, Lahore Leads University, Pakistan; ²Jinnah Hospital, Lahore, Pakistan; ³Department of Psychology, Women Sub Campus University of Malakand, Pakistan; ⁴Lecturer Psychology, Lahore Leads University, Pakistan; ⁵Assistant Professor/ Consultant, Speech & Language Pathology, Rehman College of Rehabilitation, Sciences (RCRS) Peshawar, Pakistan.

Email: *wahidaanjum@yahoo.com

Received on 5th January 2021, Revised on 20th February 2021, Published on 5th March 2021

Abstract

Purpose: Postgraduate medical students or residents are candidates who gain rigorous specialized training in any field of medical science. The study attempted to explain how work-life fit and perceived social support minimize burnout in public hospital general surgery units.

Method: Explanatory, cross-sectional, and quantitative research methods were employed. A questionnaire was administered to 120 respondents using purposive sampling. Besides reliability and validity testing, inferential statistics were used to evaluate data and test hypotheses.

Principal Findings: Work-life fit and perceived social supports affect emotional tiredness in responders. However, perceived social support and emotional weariness outweigh work-family balance and emotional exhaustion. Burnout is predicted by the number of children, gender, work-life balance, work-life interference, and personal life interference.

Implications: The current study helps us understand the process that affects the professional efficacy of medical professionals. Despite their high cognitive capacity, they were victims of depersonalization, emotional tiredness, and burnout. Therefore, it is crucial to successfully address surgeon burnout to enhance patient care.

Novelty: The study has novel findings for exploring the link between work-life balance, social support, and burnout in the cultural settings of Pakistan. It was not comprehensively investigated in our traditional healthcare system which is lacking in internal and external rewards therefore a complete investigation of the matter is required. Thus, these findings will enrich scientific understanding to further study these topics.

Keywords: Work-Life Balance, Social Support, Burnout, Residents of General Surgery.

INTRODUCTION AND LITERATURE REVIEW

The entirety of the healthcare care industry has recognized the significance of higher education and maintaining current clinical skills to alleviate the afflictions that plague humanity most effectively. To alleviate human suffering in the current era, self-motivation, determination, dedication, and resiliency are necessary for general surgery. Residents in the area of surgery need help to adjust to the demanding and stressful bureaucratic working conditions with little autonomy, hospital accreditation procedures, clinical audits, and administrative activities. Although the Hippocratic Oath in medical school emphasized the significance of the patient's health, residents in the field have difficulty getting used to these conditions. After doing a thorough investigation into the relevant prior literature, it has been discovered that the expectations of training, combined with insufficient supervision by a qualified professional, compound the problems of poor eating practices, excessive tea and coffee consumption, a lack of social interaction, and a decrease in physical activity, all of which lead to sleep deprivation, emotional exhaustion, and burnout. These issues are caused by a downward spiral that begins with decreased physical activity (Elmore et al., 2016).

Conservation of Resources Theory (Holmgreen et al., 2017) contends that people use different resources to complete work tasks, such as time, cognitive attention, and physical energy. However, they need to replenish those resources during breaks to avoid stress. It is only possible in the context of residents of general surgeons owing to a need for updating the health-related facilities and promotion packages against one's investment. A knowledge-based, competitive atmosphere in the modern healthcare sector led to more exams and viva voce in the quest for individual success. This rivalry causes a never-ending cycle of misery to emerge. Due to the shortage of healthcare resources, employment opportunities, and job security, the corporate environment is now more complicated and diversified than ever. This circumstance lends credence to the findings of social exchange theory (Cook et al., 2013). It states that discrepancies between benefits and costs will inevitably lead to the deterioration of the relationship and the onset of cognitive dissonance. It is evident when considering the situation of residents training to become general surgeons. Lack of good social support from family, friends, and significant others resulted in burnout among medical health professionals. Burnout is characterized by emotional weariness, depersonalization, and a loss of interest in one's job after providing full attention and devotion to the organization for an extended time. Although the actual incidence of this problem is unknown, estimates put it anywhere between 40 and 80 percent worldwide (Holzer et al., 2019). The sensation of being



Humanities & Social Sciences Reviews eISSN: 2395-6518, Vol 9, No 1, 2021, pp 133-141 https://doi.org/10.18510/hssr.2021.9114

burned out is a crucial factor that considerably reflects the relationship between age, marital status, educational level, and debt (Hyman et al., 2017).

General surgery requires care around the clock and has an unsatisfactory pay structure that causes employees to spend money rather than earn it. In a comprehensive nationwide research of 7905 American surgeons of various modalities, Shanafelt et al. (2011) found that 1 in 16 reported suicide ideation in the previous year. Surgeons 45 years and older had 1.5- to 3-fold higher suicide thoughts than the US population. Surgeons are well educated, virtually uniformly employed, and essentially (88%) married, factors believed to minimize suicide risk in the general population making their higher suicidal incidence even more surprising. In contrast to the general population, surgeons aged 45 to 54 had a higher likelihood of suicidal thoughts than younger people. The surgical sector's failure to adapt effectively to its ever-changing difficulties sets the path for its eventual demise. As a result, burnout is a prevalent issue among surgeons that requires immediate attention to fix. It is directly associated with the safety of patients (Waxman, 2011). Since 40–50 million major procedures are carried out annually in the United States, and 20 million are carried out annually in Europe, it is impossible to dismiss the significance of surgeons' role in these numbers. 5–15% of patients experienced postoperative complications that required them to be readmitted within the first 30 days, and 15% of patients developed significant morbidities. Infections were responsible for the deaths of 1% to 4% of patients (Nepogodiev et al., 2019).

Despite efforts worldwide to improve patient safety, eight million people per year still pass away due to a heart attack, stroke, cancer, or an accident. This results in billions of dollars spent on healthcare in developed and developing countries. Therefore, it is essential to preserve work-life balance to benefit both. Sometimes it becomes challenging to maintain a work-life balance since the work-life interface is bidirectional, meaning both work and personal life can be impacted by family life, leisure activities, and health. In modernism, it is challenging to maintain a separation between job and personal life. Work-life balance is very individualized and varies from person to person. It is a state of equilibrium between personal and professional responsibilities (Rotenstein et al., 2018; Han et al., 2019).

The work-family border hypothesis (<u>Kelliher et al., 2019</u>) asserts that family and work are distinct entities with different responsibilities. Technological improvements and occupations allow individuals to work from anywhere, anytime, and location, which might cause discord in one sphere. The idea of boundaries (<u>Field & Chan, 2018</u>) explains that each person must decide whether to prioritize their family life or their job. When the two functions are blended and integrated rather than isolated, the transition between them is more manageable (<u>Nippert-Eng, 1996</u>).

The industrial revolution separated economic activity from family life, which was strengthened by technological improvements in the 19th century. This separation is still present in the idea of structural functionalism (Parsons, 2017), which arose earlier in the twentieth century. It outlines the roles of males (outside the home, at work) and women (inside the house: household activities). According to gender roles, the structural-functional theory describes boundaries between work and family life (Kingsbury & Scanzoni, 2009).

The concept of greedy institutions was introduced by <u>De Campo (2013)</u>. According to this theory, professional and family institutions are greedy because they discourage participation in other social spheres while encouraging a high level of commitment, devotion, and dedication on the part of individuals. Since it expects one to fulfil parental responsibilities, the family unit it is seen as exploitative. When people bounce between two hungry institutions, they gradually lose the capacity to handle the demands of their job and personal lives, resulting in disputes. The conflict hypothesis (<u>Greenhaus & Allen, 2011</u>) gives the same reasoning regarding how a person's profession and family are quite diverse and demanding entities requiring equal attention to be satisfied. Conflicts arise if there is an imbalance between a person's personal and professional life. In addition, the segmentation theory of work-life balance proposed that as work and famThereforeonsibilities occupy distinct realms, they canThereforeete (<u>Hsu et al., 2019</u>). Therorfe, it is necessary to conduct investigations of this kind, which is the primary objective of the current study. This investigation should take place within the cultural setting of Pakistan. The following aims and hypotheses have been developed based on the material presented earlier of helped.

Objectives

- 1. To assess the levels (low and high) of work-life balance (work interference with personal life, personal life interference with work, and work/personal life enhancement), social support (family and friends), and burnout (emotional exhaustion, depersonalization, and personal accomplishment) among residents of general surgery.
- 2. To gauge the link between the research variables.
- 3. To look at the factors that lead to burnout in general surgery residents.

Hypotheses

1. Disparities exist between high and low scores on the work-life balance (work interference with personal life, personal life interference with work, and work/personal life enhancement), social support (family and friends), and burnout (emotional exhaustion, depersonalization, and personal accomplishment).



- 2. Work-life balance, work/personal life enhancement, social support from family and friends, and personal accomplishment all have a positive link. In contrast, all these factors have an inverse relationship with burnout, emotional exhaustion, and depersonalization.
- 3. Demographic variables, work-life balance, social support, and their subscales will predict burnout and its subscales.

METHODOLOGY

Sample and Data Collection

This survey was carried out using an explanatory, cross-sectional, and quantitative research design. The sample was collected using the purposive sampling technique, and G^* power 3.1 was used to compute the sample size for a two-tailed, medium effect size (p = .30) with a 95% confidence interval (Field, 2018). One hundred twenty participants were included in the sample, but 20 forms had to be eliminated due to missing data. Since the floor and ceiling effects of the scales produced outliers and went against the assumptions of normality, the final analysis was limited to 100 general surgery residents. Table 1 lists the participants' individual characteristics (see it for detail)

Table 1: Descriptive Statistics of the General Surgery Residents' Personal Information (N = 100)

Individual Characteristics	Frequency/ M, SD
Age	M = 28.03, $SD = 1.27$ (range: 25-40 years)
Gender	
Male	50
Female	50
Marital Status	
Married	66
Single	34
Duration of Marriage	M = 1.02, $SD = 1.08$ (1 to 5 years)
Number of Children	
Non	5
Single child	23
Two children	10

Table 1 provides information about the participant's demographics.

Measurers

In social science study, one of the most critical issues to focus on is the operationalization of a construct (Wong, 2013). It was argued by Hyman, Lamb, and Bulmer (2006) that individuals should make use of pre-established scales since it is possible to determine the validity and reliability of a pre-established scale. As a direct consequence of this, the writers utilized the scales as follows:

Demographic Information

The demographic form was used to gather both personal and professional data, including age, gender, marital status, length of the marriage, number of children, spouse education, spouse profession, monthly income, ownership of a home or rent, living with family or in a dorm, Family system, area, total work history, part-time employment, work hours per week, years of residency, special Sundays per month, and weeknights spent on calls. The results section did not include personal and professional demographic characteristics that were not statistically significant.

Work-Life Balance (WLB)

Work-Life Balance (Agha et al., 2017) had 15 items with three subscales: Work Interference with Personal Life (WIPL), Personal life Interference with Work (PLIW), and Work/Personal life Enhancement (WPLE). The first 1-7 items measured the WIPL having sample item "my job makes personal life difficult." WPLE was computed using 12-15 items, and the sample item was "my work suffers because of personal matters ."The items from 12-15 cater to the WPLE with the sample item "my job gives me the energy to pursue personal activities / I have a better mood at work because of personal life ."Each item receives a rating on a 5-point Likert scale, with five representing "strongly agree," 4 "agree," 3 "neutral," 4 "disagree," and 5 "strongly disagree." The present sample yielded Cronbach's alpha reliability coefficients of 0.89, 0.88, and 0.87, respectively, which deviate little from the original subscales of 0.9, 0.9, and 0.8. The literature (Drost, 2011) rated the subscales' internal consistency range as good.

Multidimensional Scale of Perceived Social Support (MSPSS)

The Multidimensional Scale of Perceived Social Support was created in English by Zimet et al. (1990). Twelve items comprised the perceived social support from friends, family, and significant others questionnaire, which had a three-factor structure. Due to low factor loading and a low Cronbach's alpha reliability value, two subscales in this study—perceived social support from family and friends—was utilized for the primary analysis instead of the subscales for



significant others. "My family genuinely tries to help me, and I can talk about my difficulties with my friends" these were two examples of how the family and friends were viewed as providing social support. The information was gathered using a pattern of Likert-type responses, where 1 represented a *very strong disagreement*, 2 = a moderate disagreement, 3 = a mild disagreement, 4 = a neutral opinion, 5 = a mild agreement, 6 = a strong agreement, and 7 = a very strong agreement. Internal consistency was 0.81 and 0.98 for the original subscales, while it was determined to be 0.89 and 0.86 in the current sample, which is good to excellent in the social sciences (Bandalos, 2018).

Maslach Burnout Inventory (MBI)

22-items make up the Maslach Burnout Inventory (Maslach et al., 1997), which comprises three elements called Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA). The Emotional Exhaustion (EE) subscale evaluates how emotionally weary one feels due to their profession. It also addresses energy loss, exhaustion, overtiredness, and enervation. Understanding stress in the context of intricate interpersonal relationships, such as how an individual view himself and their relationships with others, is helpful. Nine items make up it (1, 2, 3, 6, 8, 13, 14, 16, and 20), and the EE example item is "I feel emotionally drained."

Depersonalization (DP) measures the ability to be an objective observer of oneself or to be removed from one's mind or body. People may feel they have changed and that the world has become hazy, dreamy, less tangible, meaningless, or detached from reality. Along with measuring poor productivity, low morale, retreat, and an inability to handle obstacles, it also evaluates a negative and improper attitude toward clients. "I have become more callous towards people since I took this job" is an example from this subscale. Five items make up it (5, 10, 11, 15, and 22).

Personal accomplishments (PA) are the sensations of competence and success in one's work largely resulting from much effort. I can readily comprehend how my recipients feel about things. It has 8 items (4, 7, 9, 12, 17, 18, 19, and 21). Measures the burnout conditioIndividuals'oad perspective and gauges the degree aIndividuals'f professional burnout. Individuals suffering is not measured. It uses a six-point Likert scale, where 0 = never, 1 = few times a year or less, 2 = once a month or less, 3 = a few times a month, 4 = once a week, 5 = a few times a week, and 6 = every day. It was determined that the instrument's satisfactory Cronbach's alpha reliability coefficients for the current sample were total burnout =.88, EE =.87, PA =.76, and DP =.89.

Procedure

Before beginning the study, the following approvals were required: (1) informed consent from the volunteer participants; (2) use of the study scales by three authors; (3) higher authorization to collect data; and (4) approval from the LLU Ethical Review Committee. The higher authority was consulted to obtain permission to gather data from several government tertiary care hospitals in Lahore. After considering all ethical factors, volunteers were approached, and informed consent forms were signed. Data were collected using a demographic form, the Maslach Burnout Inventory, the Multidimensional Scale of Perceived Social Support, and the Work-Life Balance scale. The questionnaire forms were completed in 20 to 25 minutes on average. 98% of participants responded that their efforts were appreciated. Data analysis was done using the SPSS-20 statistical package for social sciences. Data were reviewed before being entered into the software, and 20 forms were eliminated, creating outliers and breaking the assumptions of normalcy.

RESULTS AND ANALYSIS

Social scientists have long discussed common method bias (CMB). Fiske (1982) suggested that each operationalizing instrument has a systematic error and construct variance. In social sciences, when perceptions are tested, respondents often lie. Confusing question wording, double-barreled inquiries, and repetition of the words created confusion. These occurrences may generate stylistic reactions (Hulland et al., 2018). CMB in a survey raises the risk of spurious internal consistency, implying incorrect findings. This study minimized CMB using theoretical and statistical methodologies. Randomly dispersing questions violated responders' preconceived order. The writers encouraged honesty and assured responder confidentiality.

Table 2: Descriptive Statistics and the Study Variables' Psychometric Characteristics (N = 100)

					Range			
Variables	K	Alpha	M	SD	Actual	Potential	Skewness	Kurtosis
Work-life Balance	15	.90	49.69	5.93	49.00	15-75	.05	14
Work Interference with Person Life	7	.89	25.60	4.62	24.78	7-35	50	.43
Personal Life Interference with Work	4	.88	11.23	3.66	10.93	4-20	.14	80
Work/Personal Life Enhancement	4	.87	12.72	2.71	13.07	4-20	12	39
Perceived Social Support	8	.82	42.66	7.88	8-56	23-56	-1.18	1.39



_								
Perceived Social Support from Family	4	.89	22.07	4.42	4-28	9-28	-1.26	1.68
Perceived Social support from Friends	4	.86	20.58	4.85	4-28	7-28	57	.80
Burnout	22	.88	77.03	16.41	0-13	37-11	10	23
Emotional Exhaustion	9	.87	31.49	9.91	0-54	0-54	39	.46
Depersonalization	5	.89	30.46	6.39	0-25	2-25	25	-1.14
Personal Accomplishment	8	.76	15.06	6.28	0-48	14-44	07	19

Table 2 lists the psychometric characteristics of the study variables. It shows that all the scales have satisfactory levels of Cronbach's alpha reliability coefficients. It has a reliability range of 0.76 to 0.90, regarded as good to outstanding in the social sciences. Data are normally distributed, according to descriptive statistical analysis, which demonstrates that the values of skewness (05 to -1.26) and kurtosis (-10 to 10) are within the restricted ranges (-3 to 3 and -.14 to 1.39, respectively) (Bono et al., 2019).

Table 3: Low and High Study Variable Scores for General Surgery Residents (N = 100)

Variables	Low Scores	High Scores
Work-Life Balance	67	33
Work Interference with Person Life	12	88
Personal Life Interference with Work	37	63
Work/personal Life Enhancement	78	22
Perceived Social Support	30	70
Perceived Support from Family	45	55
Perceived Social Support from Friends	89	11
Burnout	58	42
Emotional Exhaustion	46	54
Depersonalization	53	47
Personal Accomplishment	82	18

Table 3's findings showed that most participants had a poor sense of work-life balance and much work that interfered with their personal lives. Interestingly, most general surgery residents score low on the emotional life interference with work dimension, indicating that individual life does not significantly interfere with work. Their ability to balance work and personal life has mostly stayed the same. Their overall perceptions of social support are relatively strong, although they receive more assistance from family than friends. Their emotional exhaustion ratings are high, but their overall burden, depersonalization, and personal accomplishment scores are relatively low.

Table 4: Inter-correlation between Work-life Balance, Perceived Social Support, Burnout, and its Subscales (N = 100)

Variables	2	3	4	5	6	7	8	9	10	11
1. Work-life Balance	.66**	.64**	.21	.06	03	.11	.19	.17	.08	.06
2. Work Interference with Personal Life		.09	38**	.26*	.24*	.25	.21	.37**	.04	.04
3. Personal Life Interference with Work			09	26*	25*	20	.20	.19	.02	.26*
4. Work/Personal Life Enhancement				.05	07	.15	23*	27*	02	18
5. Perceived Social Support					.84**	.87**	09	.04	18	17
6. Perceived Social Support from Family						.45**	.06	.19	19	04
7. Perceived Social Support from Friends							18	10	13	17
8. Burnout								.89**	.48**	.77**
9. Emotional Exhaustion									.08	.58**
10. Personal Accomplishment										.19
11. Depersonalization								•		

^{**} p < 0.01,* p < .05 (2-tailed)

Table 4 summarizes the associations between the studied variables. Results revealed a substantial inverse link between work/personal life enhancement and work/life balance and a significant positive relationship between work interference with personal life. Perceived social support (r =.24, p <.05), perceived social support from family (r =.24, p < .05), and emotional weariness (r =.26, p < .05) were all strongly linked with work interfering with personal life. Perceived social support (r = -.26, p < .05), perceived social support from family (r = -.25, p < .05), and depersonalization (r =.26, p < .05) all had a strong inverse connection with personal life interference. Enhancing work/family/personal life had a substantial



inverse connection with emotional tiredness (r = -.27, p < .05) and burnout (r = -.23, p < .05). Perceived social support from family and friends was positively correlated with perceived social support overall in a highly significant way. Surprisingly, all other research variables aside from their construct had no link with the variable of perceived social support from friends. Emotional exhaustion, personal accomplishment, and depersonalization were the three subscales that showed a significant positive link with burnout. Interestingly, the association between burnout and personal achievement was weaker than the other factors (emotional exhaustion and personal accomplishment). Depersonalization and emotional exhaustion were significantly positively correlated. Overall, the significant relationship's magnitude ranged from within the acceptable values (.23) to good (.89). With a high sample size, the non-significant link can be strengthened.

Table 5: Predictors of Burnout, Emotional Exhaustion, Personal Accomplishment, and Depersonalization (N = 100)

Model and Outcome Variable	Predictor Variable	В	SEB	β	t	Sig.	R^2	ΔR^2	Durbin-Watson
Burnout									
Model 1	(Constant)	71.04	19.19		3.70	.000	.35	.12	2.25
	Work-life Balance	-4.81	4.01	-1.79	-1.19	.002			
Emotional Exha	ustion								
Model 1	(Constant)	19.12	6.26		3.05	.003	.23	.06	2.20
	Work Interference with Personal Life	.49	.24	.23	2.06	.043			
Personal Accor	nplishment								
Model 1	(Constant)	27.88	1.41		19.81	.000	.24	.06	
	Number of Children	1.21	.57	.24	2.13	.037			
Depersonalization	on								
Model 1	(Constant)	10.41	2.29		4.54	.000	.24	.06	2.13
	Personal Life Interference with Work	.422	.192	.27	2.19	.031			
Model 2	(Constant)	14.60	2.76		5.28	.000			
	Personal Life Interference with Work	.48	.19	.28	2.59	.04	.37	.14	
	Gender	-3.45	1.39	28	-2.57	.04			

Several stepwise linear regression analyses were conducted to investigate the potential determinants of total burnout, emotional tiredness, personal accomplishment, and depersonalization. Age, gender, marital status, length of the marriage, number of children, monthly income, weeknight work hours, night emergency call, ward weeks, part-time job, work-life balance, work-life conflict, personal conflict with work, total social support, social support from family and friends, and work-life conflict were all considered as predictors. All independent variables were subjected to stepwise regression analysis, and table 5 indicated significant predictors. Durbin-Watson's statistics results demonstrated that the data met the regression analysis's assumptions, ranging from 2.13 to 2.25, with values lower than one and above three. $R^2 = .35$, F(6, 94) = 1.59 for model 1, $R^2 = .23$, F(1, 99) = 4.24 for model 2, $R^2 = .24$, F(2, 98) = 4.53 for model 3, $R^2 = .24$, F(1, 99) = 4.53 for model 4, $R^2 = .37$, F(2, 98) = 6.23 for model 5 (***p < .000). Additionally, t-tests with ranges between -1.1 to 19.81 showed that the study's predictors significantly influenced all models. Additionally, it is determined that the relationship's size is sufficient. Work-life balance accounts for 35% of the variance in total Burdon. Work interference with personal life accounts for 24% of the variance in emotional exhaustion. The number of children accounts for 24% of the variance in personal accomplishment. When personal life interference is combined with gender, the value of R^2 increases by 14%. Depersonalization accounts for 37% of the variance. The overall fit of the model indicated that all of these predictive factors in the result variables explained just 37% of the variation in the predictors. In contrast, other factors that may be looked at in future research accounted for 63% of the variation.



Humanities & Social Sciences Reviews eISSN: 2395-6518, Vol 9, No 1, 2021, pp 133-141 https://doi.org/10.18510/hssr.2021.9114

DISCUSSION

This study aimed to explore and explain the degree of work-life balance, social support, and Burdon. In addition, the link between these variables and predictors of burnout was investigated. In this sense, the general objectives of the current study were considerably attained, showing that the study was successful. As a result, the findings of this study validated that most of the participants reported a poor sense of work-life balance, and their jobs interfered with their personal lives. Most general surgery residents score low on the personal life interference with work dimension, which means personal life does not significantly interfere with professional life.

This study supported the view of Shanafelt et al. (2015) that between 2004 and 2018, the prevalence of burnout among residents was over 50%, ranging from 18 to 74 percent globally. Physician burnout increased from 45.5% in 2011 to 54.4% in 2014. According to Guest et al. (2011), surgeons had burnout levels of low (10, 27.8%), moderate (23, 63.9%), and high (3, 8.3%). 30% of surgeons used alcohol as a coping strategy, 13% used sleeping pills, 42% experienced burnout, and 27% experienced psychological distress. More than 50% of students marked the exams as a stressor. Depression and burnout are linked, which has resulted in decreased productivity and impairment at work after graduation. Burnout among surgical residents was 51.0% in China, 57.18% in Asian countries, 27.72% in European countries, 51.64% in North America, and 54% in Pakistan (Low et al., 2019; Zubairi & Noordin, 2016).

Previous studies have linked medical burnout to high emotional tiredness and depersonalization (Maslach & Leiter, 2008). The etiological elements of burnout are technological innovation, litigation, sensationalization, and media coverage of medical blunders spread over 24-hour-a-day. These seven-day-a-week training schedules only focus on clocking in and out. However, the high patient expectations, patient volume, bad coworker relationships, abusive working conditions, and lack of autonomy diminished the tremendous energy of young surgeons. They created a hostile and toxic work atmosphere. Contrarily, lack of control over scheduling, late-night emergency calls, ward weeks, special Sundays, and sleep loss made their lives more difficult (Shanafelt et al., 2010).

Results of the current study indicated that work-life balance, personal life interference with work, and work interference with private life all had significant positive correlations. However, personal life interference with work and work/personal life enhancement are negatively correlated. Emotional exhaustion was significantly correlated with perceived social support from family and friends. Personal life interference and perceived social support from family were inversely correlated. They were enhancing one's personal and professional life negatively correlated with burnout and emotional exhaustion. Burnout was significantly predicted by several factors, including gender, work-life balance, work interference with personal life, and personal life interference with work.

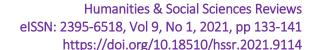
There is a strong correlation between education, employment, and salary (Kahneman & Deaton, 2010). Working too regularly for surgeons unintentionally affects their work-life balance, happiness, and risk for substance addiction, aggression, stress, anxiety, depression, and mental health issues. Overworking is detrimental and speeds up self-destructive behavior, which harms one's health and interpersonal relationships, including those with family members, friends, and, ultimately, patients (Balch et al., 2011). Rajeev et al. (2017) found a positive link between emotional tiredness and mental morbidities (depression, anxiety, distress, and burnout) and a negative correlation between job satisfaction and workplace stress in general surgeons. Over time, these mental health problems worsen if left spurned. It could be connected to drug misuse, suicidal thoughts, and musculoskeletal pain. An individual's happiness level is influenced by various essential aspects, including family ties, flexibility, and parental support. It increases with family bonding, adaptability, and support. The study's findings also showed that people who lived in single-parent households reported much lower life satisfaction than those who did not (Tafa & Baiocco, 2009).

CONCLUSION

Participants reported poor work-life balance and less social support from friends than relatives. Work-life balance, work-life interference, and personal-life interference are linked. Burnout variation was 35% due to the number of children, gender, work-life balance, work-life interference, and personal life interference. Other factors, which may be studied further in a future study, accounted for 65% of variances. Perceived social support from friends remained non-significant, painting a different picture of friendship among general surgeons. Because they may not have time for friendships, that is the study's original contribution thus far.

PRACTICAL IMPLICATIONS

The study offers several significant practical implications. Utilizing a cohesive approach that emphasizes work-life balance, social support, and demography increases our knowledge of the fundamental causes of burnout. The authors claim that by upgrading the organizational structure and medical facilities, Pakistani tertiary care institutions prevent burnout and stress among postgraduate students. The health sector should adopt capacity-building programs, stress-management coping methods, career counseling, and encouraging social activities to improve the current situations of the surgeons. It may be beneficial to recognize biological or psychological characteristics that exacerbate burnout, emotional exhaustion, and depersonalization. External factors (high earnings, insurance, and educational benefits for their families) should be introduced to allay their financial worries. These suggestions will support them in achieving their goals and providing better patient care. By reconsidering the practice model, people can pick careers based on





aptitude and ability. Teaching trainees or students, excelling as a researcher to get sponsored projects, joining the clinical practice, taking on administrative responsibilities, and receiving solid social support from parents and mentors can all be options. Any of these options can also reduce work-life balance issues. Consequently, a training program may also be made available to them.

LIMITATIONS AND FUTURE RECOMMENDATIONS

Social support, burnout, and work-life balance scales are valuable and valid social science tools. Thus researchers used them to examine these factors in medical professionals. The non-significant results of the current study show that a new measure must be established in the medical field to fully understand their concerns, improve work-life balance and social support, and prevent burnout. This study's findings will be better explained by qualitative and mixed-method research approaches. For generalizability, this study should use a large, random sample. Future research should focus on demographic factors like monthly income, debt, control over one's schedule through working hours, number of weeknights spent on calls, and ward weeks, as well as marital status, spouse profession, number of children, exam failure, and frustration over unsuitable placements after training but before part two exams.

REFERENCES

- 1. Agha, K., Azmi, F. T. & Khan, S. A. (2017). Work-Life Balance: Scale Development and Validation. In: Heras, M. L., Chinchilla, N. & Grau, M. (eds). The Work-Family Balance in Light of Globalization and Technology (pp. 109–130). Cambridge Scholars Publishing, Newcastle upon Tyne, UK.
- 2. Balch, C. M., Shanafelt, T. D., Sloan, J., Satele, D. V., & Kuerer, H. M. (2011). Burnout and career satisfaction among surgical oncologists compared with other surgical specialities. *Annals of surgical oncology*, *18*(1), 16-25. https://doi.org/10.1245/s10434-010-1369-5
- 3. Bandalos, D. L., & Finney, S. J. (2018). *Factor analysis: Exploratory and confirmatory*. In The reviewer's guide to quantitative methods in the social sciences (pp. 98-122). Routledge. https://doi.org/10.4324/9781315 755649-8
- 4. Bono, R., Arnau, J., Alarcón, R., & Blanca, M. J. (2019). Bias, precision, and accuracy of skewness and kurtosis estimators for frequently used continuous distributions. *Symmetry*, *12*(1), 19. https://doi.org/10.339/0/sym12010019
- 5. Cook, K. S., Cheshire, C., Rice, E. R., & Nakagawa, S. (2013). *Social exchange theory*. In Handbook of social psychology (pp. 61-88). Springer, Dordrecht. https://doi.org/10.1007/978-94-007-6772-0_3
- De Campo, M. E. (2013). Contemporary Greedy Institutions: An Essay on Lewis Coser's Concept in Times of the 'Hive Mind'. Sociologický časopis/Czech Sociological Review, 49(06), 969-987. https://doi.org/10.13060/00380288.2013.49.6.05
- 7. Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and perspectives*, 38(1), 105-123.
- 8. Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and perspectives*, 38(1), 105-123.
- 9. Elmore, L. C., Jaffe, D. B., Jin, L., Awad, M. M., & Turnbull, I. R. (2016). A national survey of burnout among US general surgery residents. *Journal of the American College of Surgeons*, 223(3), 440-451. https://doi.org/10.1136/bmjopen-2016-013897
- 10. Field, A. (2018). Discovering statistics using IBM SPSS statistics 5th ed.
- 11. Field, J. C., & Chan, X. W. (2018). Contemporary knowledge workers and the boundaryless work-life interface: Implications for the human resource management of the knowledge workforce. *Frontiers in Psychology*, 9, 2414. https://doi.org/10.3389/fpsyg.2018.02414
- 12. Fiske, D.W., (1982). Convergent-discriminant validation in measurements and research strategies. N. Dir. *Methodol. Social Behavioural Science*. 12, 77-92.
- 13. Greenhaus, J. H., & Allen, T. D. (2011). Work-family balance: A review and extension of the literature. In J. C. Quick & L. E. Tetrick (Eds.), *Handbook of occupational health psychology* (2nd ed.). (pp. 165-183). Washington, DC US: American Psychological Association. https://doi.org/10.2307/j.ctv1chs29w.14
- 14. Han, S., Shanafelt, T. D., Sinsky, C. A., Awad, K. M., Dyrbye, L. N., Fiscus, L. C., ... & Goh, J. (2019). Estimating the attributable cost of physician burnout in the United States. *Annals of internal medicine*, *170*(11), 784-790. https://doi.org/10.7326/M18-1422
- 15. Holmgreen, L., Tirone, V., Gerhart, J., & Hobfoll, S. E. (2017). Conservation of resources theory. The Handbook of stress and health: A guide to research and practice, 2(7), 443-457. https://doi.org/10.1002/9781118993811.ch27
- 16. Holzer, E., Tschan, F., Kottwitz, M. U., Beldi, G., Businger, A. P., & Semmer, N. K. (2019). The workday of hospital surgeons: what they do, what makes them satisfied, and the role of core tasks and administrative tasks; a diary study. *BMC surgery*, *19*(1), 1-9. https://doi.org/10.1186/s12893-019-0570-0
- 17. Hsu, Y. Y., Bai, C. H., Yang, C. M., Huang, Y. C., Lin, T. T., & Lin, C. H. (2019). Long hours' effects on work-life balance and satisfaction. *BioMed research international*, 2019. https://doi.org/10.1080/00223891.1990.9674095





- 18. Hulland, J., Baumgartner, H., Smith, K.M., (2018). Marketing survey research best practices: evidence and recommendations from a review of JAMS articles. *Journal of the Academy of Marketing Science*, 46(1), 92-108. https://doi.org/10.1007/s11747-017-0532-y
- 19. Hyman, L., Lamb, J., Bulmer, M.(2006). *The use of pre-existing survey questions: implications for data quality*. Paper presented at the. In: Proceedings of the European Conference on Quality in Survey Statistics.
- 21. Kahneman, D., & Deaton, A. (2010). High income improves evaluations of life but not emotional well-being. *Proceedings of the national academy of sciences, 107*(38), 16489-16493. https://doi.org/10.1073/pnas.10114 92107
- 22. Kelliher, C., Richardson, J., & Boiarintseva, G. (2019). All of the work? All of life? Reconceptualizing work-life balance for the 21st century. *Human Resource Management Journal*, 29(2), 97-112. https://doi.org/10.1111/1748-8583.12215
- 23. Kingsbury, N., & Scanzoni, J. (2009). *Structural-functionalism*. In Sourcebook of family theories and methods (pp. 195-221). Springer, Boston, MA. https://doi.org/10.1007/978-0-387-85764-0 9
- 24. Low, Z. X., Yeo, K. A., Sharma, V. K., Leung, G. K., McIntyre, R. S., Guerrero, A., ... & Ho, R. C. (2019). Prevalence of burnout in medical and surgical residents: a meta-analysis. *International journal of environmental research and public health*, *16*(9), 1479. https://doi.org/10.3390/ijerph16091479
- 25. Maslach, C., & Leiter, M. P. (2008). Early predictors of job burnout and engagement. *Journal of applied psychology*, 93(3), 498. https://doi.org/10.1037/0021-9010.93.3.498
- 26. Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach burnout inventory. Scarecrow Education.
- 27. Nepogodiev, D., Martin, J., Biccard, B., Makeup, A., Bhangu, A., Ademuyiwa, A., ... & Morton, D. G. (2019). Global burden of postoperative death. *The Lancet*, 393(10170), 401. https://doi.org/10.1016/S0140-6736(18)33139-8
- 28. Nippert-Eng, C. (1996). *Calendars and keys: The classification of "home" and "work"*. In Sociological Forum (Vol. 11, No. 3, pp. 563-582). Kluwer Academic Publishers-Plenum Publishers. https://doi.org/10.1007/BF02408393
- 29. Parsons, T. (2017). *The present status of "structural-functional" theory in sociology*. In The idea of social structure (pp. 67-84). Routledge. https://doi.org/10.4324/9781315132563-5
- 30. Rotenstein, L. S., Torre, M., Ramos, M. A., Rosales, R. C., Guille, C., Sen, S., & Mata, D. A. (2018). Prevalence of burnout among physicians: a systematic review. *Jama*, 320(11), 1131-1150. https://doi.org/10.1001/jama.2018.12777
- 31. Shanafelt, T. D., Balch, C. M., Bechamps, G., Russell, T., Dyrbye, L., Satele, D., ... & Freischlag, J. (2010). Burnout and medical errors among American surgeons. *Annals of surgery*, 251(6), 995-1000. https://doi.org/10.1097/SLA.0b013e3181bfdab3
- 32. Shanafelt, T. D., Balch, C. M., Dyrbye, L., Beauchamp, G., Russell, T., Satele, D., ... & Oreskovich, M. R. (2011). Special report: suicidal ideation among American surgeons. *Archives of surgery*, *146*(1), 54-62.
- 33. Shanafelt, T. D., Hasan, O., Dyrbye, L. N., Sinsky, C., Satele, D., Sloan, J., & West, C. P. (2015, December). Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *In Mayo clinic proceedings* (Vol. 90, No. 12, pp. 1600-1613). Elsevier. https://doi.org/10.1016/j.mayocp.2015.08.023
- 34. Tafa, M., & Baiocco, R. (2009). Addictive behavior and family functioning during adolescence. *The American Journal of Family Therapy*, 37(5), 388-395. https://doi.org/10.1080/01926180902754745
- 35. Waxman, B. P. (2011). Caring and sharing: strategies for recognizing and surviving burnout in surgeons. *ANZ Journal of Surgery*, 7(81), 493-494. https://doi.org/10.1111/j.1445-2197.2011.05803.x
- 36. Wong, K.K.-K. (2013). Partial least squares structural equation modelling (PLS-SEM) techniques using SmartPLS. Market. *Bull.* 24(1), 1-32
- 37. Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the multidimensional scale of perceived social support. *Journal of personality assessment*, *55*(3-4), 610-617.
- 38. Zubairi, A. J., & Noordin, S. (2016). Factors associated with burnout among residents in a developing country. *Annals of medicine and surgery*, 6, 60-63. https://doi.org/10.1016/j.amsu.2016.01.090