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Till Work Do us Part. An Investigation of Occupational Burnout, Familial Relationships, and Quality of Life

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ABSTRACT

Background: Burnout is a work-oriented psychosomatic syndrome that gradually develops in response to chronic occupational stress, resulting in adverse health alterations. Recent evidence indicates that burnout can actually develop across all occupational fields, in every industrialized society, effectively making it a significant concern for employees and employers alike.

Objectives: To address the intrapersonal and interpersonal implications in terms of determinants and health-inclined outcomes, the current study aims to investigate the paradigms of occupational burnout, quality of life, and familial relationships, and explore the underlying considerations of these variables.

Methods: The current study combined two coordinated, yet distinct analytical designs. Firstly, the ANOVA examined the possible effects of occupational burnout and familial relationships on quality of life, and secondly, the multiple regression analysis explored the relationship and whether or not quality of life and familial relationships, can actually predict occupational burnout. Volunteers recruited opportunistically, and the sample size consisted of 201 Greek participants.

Results: The (a) analysis of variance (ANOVA), indicated that occupational burnout and familial relationships in isolation, significantly affect quality of life, to a considerable 19,1% margin of effect. Yet, the interaction effect of these factors produces non-

significant results. Concerning the (b) correlational design (Multiple Regression), the investigation also corroborates significant results demonstrating that quality of life and familial relationships predict occupational burnout, by a 27,6% effect amplitude.

Interpretation: The current study considers burnout as a substantial factor that influences, and is influenced by, various aspects of one's life; with often detrimental effects to the general well-being. Several implications concerning burnout determinants, health-inclined consequences, as well as probable amplifying, nullifying, and even synergistic effects among the triumvirate of burnout, familial relationships, and quality of life, are discussed.

Keywords: Burnout, familial relationships, quality of life, determinants, health implications

INTRODUCTION

Burnout is a work-oriented psychosomatic syndrome that gradually develops in response to chronic occupational stress, resulting in adverse health alterations [1-4]. This relatively recent concept was initially identified and considered to be specific to human-centered occupations with elevated risk factors, such as in health care and educational settings [5-6], or in senior, highlevel management positions with substantial responsibilities and stressors [7]. Yet, recent evidence indicates that burnout can actually develop across all occupational fields, in

every industrialized society, effectively making it a significant concern for employees and employers alike [8-9]. In fact, this phenomenon, presents a growing trend, with worldwide prevalence rates upsurging to 36% [10-11], and an estimated annual cost to the global economy approximated at 1 trillion USD [12].

The initial point of burnout is mainly psychological in nature causing cognitive, emotional, and attitudinal impairments toward oneself, work, colleagues, clients, and the professional role itself [13]. However, if maintained over time, it can traverse into detrimental physio-biological health repercussions [14-15], negatively impact interpersonal relationships [16], and promote behaviors that reinforce dysfunctional occupational patterns, which perpetuate both the severity and the scope of this syndrome [17]. Correspondingly, to address the intrapersonal and interpersonal implications in terms of determinants and health-inclined outcomes, the current study aims to investigate the paradigms of occupational burnout, quality of life, and familial relationships, and explore the underlying considerations of these variables. The internal structure of burnout is typically characterized by a three-dimensional set of symptoms, including exhaustion, cynicism, and a sense of reduced personal and professional efficacy [18-20]. Exhaustion the physio-psychological reflects overexertion experiences in one workplace, often described by emotional depletion, weariness, fatigue, and generally manifested by an ongoing struggle to cope with occupational tasks [21-22]. Cynicism sense of indifference, a detachment, and apathy towards one's work, or the individuals who benefit from it [23]; is predominantly represented inappropriate and dysfunctional behavior, unidealism, negative attitude, irritability, and a tendency to avoid, or needlessly complicate interactions with co-workers and clients alike [24-25]. Lastly, lack of personal and professional efficacy, mirrors the pessimistic and doubtful self-evaluation of one's professional capabilities, and the inclination to perceive outcomes in a negative light [26]; which translates to feelings of incompetence and uncertainty in meeting occupational demands, decreased productivity, commitment, performance, reduced adaptability, and low self-confidence [27-28]. While certain individual tendencies may contribute to the development and perpetuation of these features, and ultimately to the onset of this syndrome; burnout is not a personal issue or condition, but rather the combination of work-related antecedents coupled with the individualistic interpretation of one's work environment [29].

Accordingly, the primary determinants that seemingly prompt, sustain, and aggravate this occupational phenomenon, can be broadly classified into organizational and individual factors [30, 15]. Organizational factors refer to certain burnout-inducing occupational conditions, policies, conducts, extending from the type and arrangement of tasks to the relationship among colleagues, employers and/or clients [31, 9]. Studies indicate that work overload, both quantitative and qualitative, is a leading burnout factor, as individuals working excessively (>40 hours/week) or with demands beyond their capabilities incongruence), are frequently (skill-job generate obligated to more physiopsychological effort than they have in reserve. This may equate to exhaustion and reduced cognitive performance, consequently, to emotional distancing and indifference towards one's profession, as a self-defense coping mechanism [32-33]. In addition, working outside conventional daytime hours, including night work, or high rotation shifts, can also trigger key features feelings burnout, such as depersonalization, depletion, loneliness, or disconnection [34]. This mainly stems from the disruption of circadian rhythms and sleep-wake patterns, associated with physiocognitive recovery [35-36], as well as from the social isolation and work-life imbalance.

correlated with overnight working and daytime sleeping [37-38].

Furthermore. ambiguity of designated professional role, described by vague and inexact allocation of responsibilities, is also associated with burnout. employees may not know what is expected of them; leading to role confusion, task uncertainty, stress, and frustration [39-40]. Analogously, inadequate management and perception of injustice, represented by hyper-directive, nitpicking, unfair, or inept supervision that neglects efforts achievements, significantly affects burnout, particularly in facets related to personal and professional efficacy [41-42]. Under these circumstances, employees undervalued and unsupported, leading to demotivation, disengagement, sense of incompetence, and reduced productivity [43, 41]. Equally important, lack of occupational autonomy, which portraits the restriction to influence conditions and activities in the workplace, is an additional risk factor of burnout [44-45]; while contrarywise, effectively guided employees experience autonomy and control over their work, exhibit lower burnout susceptibility and higher professional fulfillment [32]. Lastly, emotional labor, described as the process of concealing negative emotions (anger, discomfort, or fear) to comply with the ones desired by the organization (cheerfulness, empathy, or composure), with unsupportive workplace coupled environment characterized by internal conflicts and passive-aggressive behaviors between co-workers, have been additionally correlated to burnout vulnerability [46-47]. Individual factors that predispose, facilitate, or modulate the development of burnout, both in the presence or independently of the above-mentioned organizational determinants, are also well documented [48-49, 9]. For instance, personality traits are considered individualistic leading contributors to burnout [50]. In particular, neuroticism, described by emotional instability and an innate predisposition towards negative, stress-oriented emotions, is positively associated with burnout [51], while contrarywise, extraversion, which is the extent to which an individual is enthusiastic. sociable, assertive. and talkative, is negatively associated [52]. Similarly, increased levels conscientiousness, characterized by selfdiscipline, organization, and goal-oriented planning [53], agreeableness, described by cooperation, trustworthiness, and sympathy [54], and openness, presenting the capacity of being receptive to new experiences [55], are all viewed as protective factors towards burnout. Such findings suggest personality traits, shaped by a number of environmental (e.g., adverse experiences, maladaptive learned behaviors) biological factors (e.g., genetic inclination increased neuroticism), toward significantly influence how individuals choose to interpret the world and their general system of attitudes and values. Ultimately, this may provide the structural basis of functional or dysfunctional beliefs and coping strategies about occupational circumstances [56].

Other individualistic determinants may also an integral part. For example, perfectionistic striving, represented by high personal standards, an innate desire for achievement, and an extreme fear of failure, is a prime burnout factor, particularly in the presence of high job demands and in the absence of job autonomy [57-59]. addition, personal stressors, such financial and relationship issues [60], and unhealthy behavioral patterns concerning eating habits (i.e., emotional eating) and sedentarism [61], can significantly contribute to burnout. This mainly occurs because life adversities, coupled by inactive and inward focused lifestyle, can amplify stress while reducing effective plans of [62]. Unavoidably, this action transition to occupational terrains, leading to ill-suited coping strategies of internally modifying and constantly reprocessing negative emotions of a stressful occupational event (emotion-focused coping), instead of attempting to act directly and effectively on the stressful situation at hand (problem-focused coping) [63]. Lastly, physiological concerning determinants. although no biological marker has been consistently identified [64], burnout has been increasingly regarded as a stresshypocortisolemic related condition, which by affecting cortisol, the end product of the neuroendocrine stress response also affects system, the general pathogenesis, symptomatology and course of this syndrome [65-66]. This evidence provides a detailed view on the concealed complexity of factors that seemingly prompt the onset of burnout and unsurprisingly signify the substantial negative impact of this modernized issue towards every single prospect of one's quality of life.

Quality of life encompasses the subjective interpretation of an individual's overall well-being and degree of satisfaction with various aspects of life, including physical and mental health, social relationships, or environmental conditions [67], and can be affected by a series of factors such as employment, healthcare access, economic stability, values and beliefs, or social support [68]. Literature abounds with evidence consistently indicating substantial parallel between quality of life and occupational burnout, with all across detrimental aftereffects [15, 9]. At a psychological level, these consequences are associated with cognitive impairments in concentration, memory, attention, decision-making [69], reduced resilience and coping capacity [70], depression and anxiety disorders [71], sleep disturbances [72], discontent towards life and negative self-perception [13], and even suicidal ideation [73].

In terms of physiological consequences, the manner in which quality of life is associated to burnout, prospectively predicts, and contributes to various health complications including cardiovascular diseases [74], gastrointestinal and respiratory conditions [75], type II diabetes [76], sexual dysfunction to both males and females [77], and overall increased hospital admissions

[78]. Additional repercussions may also include chronic fatigue [79], obesity [80], musculoskeletal pain [81], vulnerability to infections and immune system suppression [82], as well as accelerated aging [83], and all-cause mortality [84]. Conversely, studies indicate that elevated levels of quality of life, serve as a protective barrier towards factors that adversely influence physiopsychological well-being. including burnout; which stands in logical grounds, as individuals with better life quality, tend to possess enhanced coping skills, social support, and resources, to manage everyday [85-86]. This information stressors highlights the substantial impact of burnout on quality of life, and indirectly implicate that this phenomenon may act both as fuel and byproduct; meaning that, its adverse aftereffects may incite behavioral patterns that further entrench and exacerbate this syndrome.

Behavioral consequences that intensify the already detrimental outcomes of burnout towards quality of life, may include selfverbal neglect [87], and physical aggressiveness [88], avoiding medical and therapeutic advice [89], tobacco, alcohol, and substance abuse [90], as well as in isolated and potentially detrimental activities including excessive, competitive-oriented gaming [91], or thrillseeking gambling [53]. As expected, these behaviors also permeate into occupational landscapes, resulting in increased absenteeism [92], performance decline [31], dissatisfaction [93]. reduced organizational commitment [13], turnover intention [94], or deviant, counterproductive behaviors, such as misuse of corporate material. and even theft [95]. Correspondingly, such dysfunctional and inappropriate conduct may 'contagion effect' that generates a negative work atmosphere, which burdens not only the quality of life of individuals experiencing burnout, but also the overall well-being of those working alongside them [96]. These data highlight the substantial causality between burnout and quality of life and point out the reciprocal nature of this syndrome on various aspects of relational dynamics; thus implicating, that if burnout possess the capacity to influence occupational relationships, it could also affect or be affected by additional, and potentially more significant interpersonal connections [97].

Familial relationships which refer to the ties bonds that exist among family members, are commonly regarded among most decisive relationships profound impact on the individual's development, identity, socialization, and sense of belonging [98-99]. Studies indicate a well-established link between familial relationships and occupational burnout that has come to be acknowledged as workfamily conflict [100-101]. This concept mainly refers to the imbalance between work and home life and is characterized by a two-way manner, in which stressful occupational factors, including excessive workload, dispute among coworkers, or placing an undue importance on one's profession (i.e., workaholism), interrelate with strained familial relationships such as children misconduct, or parents that are constantly absent, tired, or reliant on others for their family needs [102-105]. significantly this tension Accordingly, increases stress in both family and occupational affairs, thus triggering burnout [106, 9].

In the same lines, evidence for specificity indicates that work-family conflict produces negative occupational outcomes, including impairments performance in productivity [107-108], feelings of 'missing out' familial events, due to overworking [109], work-life unfulfillment, and increased turnover probability [110]. Noteworthy enough, this phenomenon is especially present in circumstances of teleworking, wherein the line between job's ending point and familial starting threshold, is blurred [111-112]. In a reciprocal manner, workfamily conflict and its correlates, also prompts significant familial considerations, including higher divorce rates [113], marital and parental dissatisfaction and less time spent in family occurrences, such as family dinners or vacations [114], reduced family bonding due to insufficient energy available for family activities [115], interparental conflict and emotional strain associated with imbalance between meeting children's needs and managing work demands [116], and offspring's neglect and maltreatment [117]. Correspondingly, it is apparent that family and work, two of the most important components of a fulfilling life, form a mutually incompatible role conflict, such that increased involvement in one role (professional), renders participation in the other (family) more difficult, and vice versa [118].

On the other hand, healthy investment, and prioritization in both familial relationships and professional affairs. without neglecting either one, is associated with all-across positive effects in general, and as a protective burnout factor in particular [119-120]. For example, literature suggest that robust familial relationships support the achievements of personal and professional goals and buffer the negative emotional effects of adverse occupational circumstances, while providing instrumental resources [121]. This may augment organizational commitment, effort, and positively impact work ethics [122], as well as enhance performance and job satisfaction [123]. In a converse manner, findings reveal encouragement from co-workers, besides being a mediating and protective burnout factor [124-125], can actually predict overall family satisfaction [125]; supporting the long-standing notion that familial relationships are influenced not only by familial antecedents, but also by occupational ones [126]. In a similar vein, sociodemographic data indicate although women in general tend to exhibit more burnout characteristics [127], men who are single or divorced are actually more exposed to burnout compared with those living with a partner [113, 9]. These data suggest that the condition of one's familial relationships can be actually viewed as an amplifying or nullifying agent in burnout susceptibility and point out the interdependent fashion between occupational and familial affairs.

The present study

Accounting for the information provided, the current study aims to explore the triumvirate of occupational burnout, quality of life, and familial relationships. The rationale for this research comprehensively address the gaps in understanding burnout within psychosocial and familial perspectives, and across various professions; from fast-food workers and cleaners, to data analysts and lawyers. This is crucial as most of the available papers have potential restrictions, either because they examine only job-related predictors (performance, high workload) or focus on specific occupational groups physicians, Moreover, teachers). by addressing this paradigm from an organizational (burnout), interpersonal (familial relationships) and intrapersonal standpoint (quality-of-life), the present study may yield more accurate data, as it reflects the impact of this syndrome through various bio-psycho-social aspects of the individual's life. These premises are in accordance with the implications for future research proposed by Edú-Valsania and colleagues (2022). Lastly, to the best of the researcher's current knowledge, no other study has examined the combination of the under-studied variables, nor utilized both a design of variance analysis (ANOVA) and a correlational one (Multiple Regression).

The (two-tailed) ANOVA hypotheses are: (H₁) There is a significant effect of occupational burnout on quality of life. (H₂) There is a significant effect of familial relationships on quality of life. (H₃) There is significant interaction effect of occupational burnout and familial relationships on quality of life. The Multiple Regression hypothesis is: (H₁) quality of life and familial relationships predict occupational burnout.

MATERIALS & METHODS

Design

The current study was conducted by two yet complementary separated, design methods. Initially, a factorial independent measures analysis of variance (ANOVA) was implemented to assess the possible effects of burnout and familial relationships on quality of life; comprised of one dependent variable, which was the scores that participants exhibited on the questionnaire, quality-of-life and two independent variables, consisting of occupational burnout and familial relationships. Each independent variable encompassed two experimental conditions, in which participants, based on their questionnaire responses, were allocated (Median split method) in the appropriate experimental setting. More specifically, to occupational burnout, with regard participants exhibiting scores above or equal to the median value (79) were categorized as "high burnout", whereas participants below the median value were classified as "low burnout". Similarly, familial relationships scores that surpassed or were equal to the median value (40) were classified as "high familial relations", and contrarywise, scores below the median value were classified as "low familial relations". Secondly, a "forced entry" multiple regression analysis was also utilized to examine the potential between relationship two predictor variables, consisting of quality of life and familial relationships, and one outcome variable, involving occupational burnout. By implementing a forced entry regression design, which is extensively while examining a small number of predictor variables [128], every score across all predictor variables, were simultaneously correlated to the data of the outcome variable, thus providing integrated insights disposition tendencies, in each corresponding participant. In essence, this study, combined two coordinated, distinct analytical designs to provide a more comprehensive understanding of the investigated paradigms, and from distinct standpoints; as the ANOVA examines the possible effects of occupational burnout and familial relationships on quality of life, whereas the multiple regression investigates the relationship and whether or not quality of life and familial relationships, can actually predict occupational burnout.

Participants

The current research involved a total number of 201 participants of Greek origin, of which, 70.6 % were females (N=142) and 29.4 % were males (N=59), with ages spanning from 18 to 53 with mean age at 31.49 years (SD=8.79). Inclusion criteria encompass individuals residing in Greece, who demonstrate bilingual competence in both Greek and English so they would be able to engage in the English-written questionnaires. Participation exclusions include individuals under 18 or over 55 years old, do not currently have an active 40 hours/week), employment (typical attentional and developmental exhibit impairments, do not have close affinity with at least one family member of either orientation or procreation (e.g., mother, sister, spouse, or offspring), are under heavy suffer medication from psychological physiological and/or conditions. Volunteers recruited opportunistically, based on their socioenvironmental availability (non-probabilitybased sampling), with no specification to gender, occupational orientation, or socioeconomic status.

Materials

The materials utilized for the current research consisted of three Likert scale, standardized questionnaires. Initially, the Maslach Burnout Inventory (MBI) [129], examined occupational burnout, comprised of 22 items; responses spanned from 1 (Never) to 7 (Every day), and presented significant internal consistency (a=0.80). Item examples include "I feel emotionally exhausted because of my work", "I get the feeling that I treat some clients/colleagues

impersonally, as if they were objects", or reverse-coded items such as "I find it easy to build a relaxed atmosphere in my working environment". Secondly, the Brief Family Relationship Scale (BFRS) [130], assessed the quality of relationships, consisted of 16 items in total; responses ranged from 1 (Not at all) to 3 (A lot), and exhibited creditable internal consistency (a=0.79). Examples of this scale also include typical "In our family we really help and support each other", "I am proud to be a part of our family" and reverse-coded items "In our family we lose our tempers a lot". Lastly, the Quality-of-Life questionnaire (QOL) [67], comprised of 26 items; responses extended from 1 (Not at all / Very dissatisfied) to 5 (Completely / Very satisfied), while demonstrating substantial internal consistency (a=0.93).Item multidimensional examples involved aspects of ones' life quality, including -among others-, physical wellbeing "How much do you need any medical treatment to function in your life?", psychological state "How often do you have negative feelings, such as blue mood, despair, anxiety, depression?", social factors "How safe do you feel in your daily life?", or economic considerations "Do you have enough money to meet your needs?". Every questionnaire utilized, have been approved by the Psychology Test Bank (PTB) committee, of University of Derby.

Procedure

The procedure initiated by providing participants with information concerning the aim of this study, inclusion and exclusion criteria, experimental process and duration (approximately 11 minutes), privacy and confidentiality considerations. accredited conduct in which the researcher ought to use their data, in full accordance with the General Data Protection Regulation (GDPR). attending Individuals experimental procedure, were also informed that participation was completely voluntary and that they can withdraw from the process at any time, without giving any justification, whatsoever. Ensuing that, they were provided with contact information (email) of both the researcher and the supervisor of the current study, as well as with the University's appointable counselling center, in case the process made them feel unease in any way. Once informed consent was obtained, participants were invited to fill three questionnaires in a consecutive order: initially the 22-item occupational burnout scale (MBI), then the 16-item familial relations scale (BFRS), and lastly the 26item quality of life scale (QOL). Directly afterwards, participants were debriefed about the study and reminded that they can retract their data, up to two weeks after the experimental procedure. Prior to research-related conduct, ethics and risk assessment forms were signed and approved at the 21st of November 2022, by all the members of the university of Derby thesis project committee, operating in Athens, Greece.

STATISTICAL ANALYSIS AND RESULTS

Parametric assumptions

Prior to inferential analysis, data screening indicates that parametric assumptions are already fulfilled and sequentially, no other measure of adjusting the data (e.g., Winsorization) would be required. Across

all experimental settings, histograms, and Q - Q plots present a general linearity, with no apparent skewed or kurtosed outlines, boxplots do not exhibit any outliers, values do not produce Z-scores that exceed the approximation limits, and homogeneity of calculations (Levene's variance conclude to non-significant results (p =,254). Furthermore, additional tests most important for multiple regression, also conform to parametric assumptions as scatterplots appear linear, Durbin-Watson test suggest positive autocorrelation (DW= 1,611), and Variance Inflation Factor demonstrates satisfactory values (VIFQOL= 1,204, VIF_{BFRS} = 1,204). These data form an acceptable groundwork for the parametric tests of Factorial Independent Measures ANOVA and Multiple Regression Analysis to be properly implemented. The complete analysis of the data can be presented upon request.

Analysis of Variance (ANOVA)

The first analytic approach implemented a factorial independent measures ANOVA to investigate the possible effects of occupational burnout and familial relationships on quality of life. Mean (SD) values in each experimental condition are presented in table 1.

Table 1: Mean (SD) values in each experimental condition, across independent variables.

	High Burnout	Low Burnout	Total
High Familial Relationships	85,20(9,07)	92,87(9,05)	89,83(9,77)
Low Familial Relationships	77,97(11,81)	86,41(10,80)	81,26(9,77)
Total	80,83(11,33)	90,35(10,22)	85,57(11,77)

Descriptive analysis indicates that occupational burnout in total, possesses the biggest capacity to influence individuals' quality of life, producing an 11.77% fluctuation between high (80.83) and low (90.35)burnout participants. analogous manner, familial relationships, generate variations of 10.54%, between high (89.83)and low (81.26)familial relationships participants. Across experimental settings, individuals within the low familial relationships — high burnout spectrum, presented the lowest quality of

life scores (77.97) producing a dispersion of 19,1% compared to their high familial relationships — low burnout (92.87) counterparts.

Inferential analysis conducted via 2 (high/low burnout) x 2 (high/low familial relations) independent measures ANOVA. There was a significant main effect of occupational burnout on quality of life, F(1, 197)=29.281, p<0.0001, η ²=0.112, indicating that participants with high burnout experience significantly lower quality of life than low burnout participants.

Similarly, there was a significant main effect of familial relationships on quality of life, F(1, 197)=21.144, p<0.0001, $\eta^2=0.080$, individuals illustrating that with subordinated familial relationships significantly more subjected to hindered quality of life. Yet, there was no significant interaction effect of occupational burnout and familial relationships on quality of life, F(1, 197)=0.068, p=0.795. These data suggest although occupational burnout or familial relationships in isolation, possess the potential to influence one's life quality, individuals with reduced relationships and elevated levels of occupational burnout, manifest, by

Table 2: Correlation coefficients (p) values for the predictors

and the outcome variable.			
	Familial	Quality of life	
	relationships		
Burnout	-0,287(<i>p</i> <0,0001)	-0,519(<i>p</i> <0,0001)	
Familial		0,412(<i>p</i> <0,0001)	
relationships			

Correlation coefficients descriptive summary concluded anticipated evidence. Initially, both familial relationships (r=-0,287) and quality of life (r=-0,519), depict a strong negative relationship towards burnout, meaning that, individuals presenting decreased rates towards the condition of their familial relationships and/or their overall life quality, possess susceptibility to experience increased levels of occupational burnout. Data also exhibit a notable positive relationship between the predictor variables (r=0,412), indicating that increased rates of one's familial relationship status, is correlated to an upsurge in quality of life.

Data were analyzed by implementing a "forced entry" multiple regression approach. Analysis concluded to large effect size $(R^2=0.278, R^2_{adj}=0.268)$, signifying that, collectively, quality of life and familial relationships significantly predict occupational burnout F(2, 198)=37.699, p<0.0001. In particular, there is a significant negative relationship between quality of life and occupational burnout, t=-7.273, df=200, p<0.0001, with the experimental design

significant and considerable margin the lowest quality of life index, the interaction effect of these variables conclude to non-significant results.

Multiple Regression Analysis

The second analytic approach utilized a multiple regression analysis to examine the relationship and probable predictive tendencies of familial relationships and quality of life, towards occupational burnout. Correlation coefficients (*p*) for the two predictor variables (Familial relations / Quality of life), and the outcome variable (Burnout) are presented in table 2.

predicting that a decrease in quality of life by one unit, would correspond to an increase in occupational burnout by 0.934. However, familial relationships were not a significant predictor to occupational burnout, t=-1.328, df=200, p=0.186. These data suggest that quality of life, both in isolation, and in conjunction with familial relationships, significantly predicts occupational burnout; vet familial relationships in solitude, conclude to nonsignificant predictive results towards occupational burnout.

DISCUSSION

The current research utilized two experimental designs, to assess (a) the effects of occupational burnout and familial relationships on quality of life, and (b) whether quality of life and familial relationships can actually predict occupational burnout. Study concludes almost exclusively significant the analysis of Concerning (ANOVA), there is a significant main effect of occupational burnout on quality of life, thus supporting hypothesis¹. Similarly, there is a significant main effect of familial relationships on quality of life, hence supporting hypothesis². Yet, there seems to be no significant interaction effect of occupational burnout and familial relationships on quality of life, therefore hypothesis³ is rejected. With regard to the Multiple Regression analysis, the investigation corroborates significant results signifying that quality of life and familial relationships predict occupational burnout, thereby supporting hypothesis¹ of the correlational design.

The data produced in the current research, in conjunction with the insights provided by prior studies, generate varied implications. Initially, the current findings concur with previous literature, both on the subject of the effects and correlational dynamics between burnout and quality of life [e.g. 9, 13, 15, 31, 69, 70, 77, 80, 82, 87], as well as between burnout and familial relationships [e.g. 98-101, 104, 105, 108, 110, 118, 125, 126, 128]. This concurrence is represented by a 19,1% dispersion, indicating that strained familial relationships, accompanied by elevated levels of occupational burnout can produce negative effects that impair one's quality of life, to a sizable margin. To expand upon these premises, the current study also diversified itself from typical cause-effect methods, and by rearranging the variables and utilizing a correlational design, demonstrated that low levels of quality of life, coupled by dysfunctional familial relationships, can actually predict occupational burnout, by a magnitude of effect. These estimates indicate that not only there is a significant effect between the triumvirate of burnout, quality of life, and familial relations, but adverse conditions in one variable possess the capacity to universally drag everything down, effectively undermining all domains. Accordingly, these implications suggest a synergistic fashion between occupational, familial, and well-being affairs; a synergy that is evident in the latest literature that the current study was based upon, yet its importance is largely underdiscussed in the light of data. One plausible interpretation to this "mutual cooperation" between burnout, familial relationships, and quality of life is supported by literature investigating economic anxiety (23). This is based on logical reasoning as key characteristics of economic anxiety, including feelings of

worry, stress or unease that relate to one's job security, financial situation, economic conditions in general, are in close affinity with the stress-oriented syndrome of burnout and its correlates. Correspondingly, this idea pertains that individuals may deliberately choose to overwork, overperform, or in many instances, be subjected to adverse and abusive occupational conditions in order to provide for themselves or their family's needs, and to forestall actual or perceived economic scenarios with detrimental consequences. In turn, excessive worry generated by these circumstances unavoidably debilitates one's quality of life and strains familial ties. This consideration is also evident in the current research as by conducting supplementary tests, it produced findings indicating that their negative association besides burnout; familial relationships and quality of life exhibit a positive autocorrelation between each other, suggesting that the poorer someone's familial relations are, the lower life quality they appear to have.

By delving further into the subject, the correlation among burnout, familial affairs, and quality of life is associated to a substantial degree, to the extent in which individuals consider that circumstances of their own lives are or are not within their reach; an area of interest known as locus of control. Several studies [e.g. 15, 9] illustrate the significant role of external locus of control, in shaping the perception that forces beyond command, such as powerful others, fate, or luck primarily decide the trajectory of one's life, while personal choices and are considered powerless inconsequential. This mentality effectively sets the world as completely unchangeable and unaffected by one's presence and accordingly, may evoke feelings insignificance and helplessness confronted with the vastness of occupational and economic affairs or prompt a sense of vanity and resignment in improving one's familial ties or life quality. Yet, although some circumstances are indeed rigid and undeniably impervious to amendments, by

adopting this perception uniformly, individuals are "rewarded" with certain temporary benefits long-term with repercussions. To put it more plainly, when actions are regularly undertaken someone, one someone else's behalf, the latter may feel relived from the burden of personal responsibility, albeit at the expense weakening, of their own diminished dysfunctional resilience. and coping. Consequently, powerful others and external factors in general are to blame, for one's idleness potential inaction and circumstances that they could potentially change for the better.

On the other hand, internal locus of control, referring to the notion that individuals have control over their own decisions and actions, and they can largely determine the outcomes of their life, is considered as a buffering factor towards occupational, familial and life quality concerns [45]. However, when taking it to absolutes, elevated levels of internal locus of control have been linked to perfectionism [57], and in turn, perfectionistic striving have been associated to both work-family conflict [59], and burnout [58]. These studies, in the light of the data yielded in the present research indicate that the modernized, never-ending pursuit of being "perfect" in every aspect of life, places immense pressure and sets unrealistic standards towards oneself. occupation, and family affairs; and more importantly, focusing only on accomplishments and success, can overshadow the importance of genuine relationships familial and physiopsychological well-being.

This absolutistic approach relating to external versus internal locus of control is somewhat present in the current analysis, as in a specific statement of the burnout questionnaire "I have the feeling that my colleagues blame me for some of their problems", a polarization has been identified that existed nowhere else, with the answers ranged of "occasionally" to "almost every dav". whereas 46% of the answers were "never".

This dipole, in a question that mostly pertains elements of blame, responsibility, and the extend in which individuals understand their actual or perceived-byothers liability in matters that exceed beyond themselves, may reflect the common professional all-or-nothing perception towards matters of personal accountability. Of particular importance, this could reflect occupational scenarios in which individuals almost willingly take all the criticism for a mishap, or employees that conveniently blame others for setbacks. Sequentially, it could also highlight the importance of realistic and balanced perception recognizing things that are and are not within one's sphere of influence, and the foresight to discern which is which.

Lastly, even though the current study produced almost exclusively significant findings concerning the topics it discussed, the interaction effect of occupational burnout and familial relationships on quality of life yielded non-significant results, which by its own accord generates meaningful implications. Initially, these non-significant results may be a product of the independent measures design utilized, in participants are categorized into one of four levels within two settings (high/low burnout high/low familial relationships), regardless if they could express data that simultaneously concern both conditions. In other words, this design although it produces significant results in each variable separately, it does not encapsulate the interaction effect as efficiently a repeated measures design would, in which the same participants would perform across conditions. However, this could be an oversimplified and rather convenient interpretation of results that could otherwise provide substantial implications, potentially health-inclined protective properties.

The rationale for this assertion is based on the premise that while burnout is distressing and debilitating, its symptomatology could also serve as an incentive towards healthy change ⁽⁶⁶⁾. Accordingly, adverse symptoms

could stimulate initiation of functional cognitive and behavioral patterns, that give rise to re-evaluation of priorities as well as self-reflection of circumstances that lead to burnout in the first place. In turn, this could propel the development of healthier coping including setting boundaries strategies, concerning facets of work, family, and personal well-being, focus on self-care, and growth, and self-awareness. increased Therefore, the current analysis, identifying that occupational burnout or familial relationships in isolation, significantly affects quality of life, while the interaction effect of these variables produce non-significant findings, could implicate the possible existence of positive synergistic effects between burnout and familiar affairs. However, this is but a hint of an implication and additional research should be conducted for this notion to be worth considering.

The limitations of this research are primarily appertaining to certain unaccounted sociodemographic factors that literature indicates as essential burnout considerations [9, 113, 128]. At the outset, the current investigation was predominantly carried out within the confines of the demographic. While the outcomes of the study may yield significant implications, it is imperative to conduct further research in diverse international settings to facilitate the broad applicability of these implications to the general population. In addition, gender and age, although were used to describe the sample and have not been included as a variable for examination, may in fact provide eminent implications towards, burnout, familial relations, and life quality. This assumption is mainly attributed to the individual differences between females and males concerning their response to the stress-oriented burnout syndrome, and their overall, age-dependent resilience to adverse circumstances. Conversely, one of the prime assets of the current examination is that no data-adjusting measure were necessary in order for the inferential analysis to be utilized. This reflects that research criteria,

concerning the method implemented and the questionnaires utilized, were suitable for the current sample, and correspondingly analysis may produce more transparent and realistic data concerning the general population.

Future research, accounting the limitations and assets of the current study, should focus on re-evaluating multidimensional concepts of occupational burnout, familial affairs, and quality of life, as well as to give due consideration to equal gender proportionality and more narrow age limits. This could provide better insights towards burnout, while acknowledging the commonly overlooked importance of sociodemographic variables.

CONCLUSION

To summarize, the current study investigated the paradigms of burnout, familial relationships, and quality of life. Analysis concludes that both occupational burnout and familial relationships in isolation, significantly affect quality of life, whereas quality of life and familial relationships can predict occupational burnout. Several implications concerning determinants, health-inclined consequences as well as amplifying, nullifying, and even synergistic effects among these variables are discussed. Future research is suggested to re-assess these topics to provide improved perspective on early intervention.

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REFERENCES

- 1. Nyklíček I, Pop VJ. Past and familial depression predict current symptoms of professional burnout. J Affect Disord. 2005;88(1):63-68.
- 2. Maslach C, Leiter MP. Burnout. Stress and quality of working life: current perspectives in occupational health. 2006;37:42-491.
- Guseva-Canu I, Marca SC, Cerniţanu M. Harmonized definition of occupational burnout: A systematic review, semantic analysis, and Delphi consensus in 29 countries. Scand J Work Environ Health. 2021;47(2):95-107. doi: 10.5271/sjweh.3935.
- 4. Shoman Y, El May E, Marca SC, Wild P, Bianchi R, Bugge MD, et al. Predictors of occupational burnout: A systematic review. Int J Environ Res Public Health. 2021;18(17):9188. doi: 10.3390/ijerph18179188.
- 5. Gonçalves A, Fontes L, Simães C, Gomes AR. Stress and burnout in health professionals. In: Occupational and environmental safety and health. Springer International Publishing; 2019. p. 563-571. doi: 10.1007/978-3-030-14730-3_60.
- Klein A, Taieb O, Xavier S, Baubet T, Reyre A. The benefits of mindfulness-based interventions on burnout among health professionals: A systematic review. Explore. 2020;16(1):35-43. doi: 10.1016/j.explore.2019.09.002.
- Hamouche S, Marchand A. Linking work, occupational identity and burnout: the case of managers. Int J Workplace Health Manage. 2021;14(1):12-31. doi: 10.1108/IJWHM-01-2020-0008.
- 8. Bianchi R, Schonfeld IS, Laurent E. Burnout-depression overlap: A review. Clin Psychol Rev. 2015;36:28-41. doi: 10.1016/j.cpr.2015.01.004.

- 9. Edú-Valsania S, Laguía A, Moriano JA. Burnout: A review of theory and measurement. Int J Environ Res Public Health. 2022;19(3):1780. doi: 10.3390/ijerph19031780.
- 10. Gallup. Employee burnout: Causes and cures. 2018. Available from: https://www.gallup.com/workplace/237059/e mployee-burnout-part-main-causes.aspx.
- 11. Chen Z, Zhou L, Lv H, Sun K, Guo H, Hu J, et al. Effect of healthcare system reforms on job satisfaction among village clinic doctors in China. Hum Resour Health. 2021;19(1):1-9. doi: 10.1186/s12960-021-00650-8.
- 12. World Health Organization. Mental health at work. [Internet]. September, 2022. [cited 2023-10-26]. Available from: https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work.
- 13. Salvagioni DAJ, Melanda FN, Mesas AE, González AD, Gabani FL, Andrade SMD. Physical, psychological, and occupational consequences of job burnout: A systematic review of prospective studies. PLoS One. 2017;12(10):e0185781. doi: 10.1371/journal.pone.0185781.
- 14. De Oliveira GS, Jr. Biological evidence of the impact of burnout on the health of anesthesiologists. J Clin Anesth. 2017;41:62. doi: 10.1016/j.jclinane.2017.06.011.
- 15. Listopad IW, Michaelsen MM, Werdecker L, Esch T. Bio-psycho-socio-Spirito-cultural factors of burnout: a systematic narrative review of the literature. Front Psychol. 2021;12:722862. doi: 10.3389/fpsyg.2021.722862.
- 16. Ninaus K, Diehl S, Terlutter R. Employee perceptions of information and communication technologies in work life, perceived burnout, job satisfaction and the role of work-family balance. J Bus Res. 2021; 136:652-666. doi: 10.1016/j.jbusres.2021.08.007.
- 17. Novack MN, Dixon DR. Predictors of burnout, job satisfaction, and turnover in behavior technicians working with individuals with autism spectrum disorder. Rev J Autism Dev Disord. 2019;6(4):413-421. doi: 10.1007/s40489-019-00171-0.
- 18. Maslach C, Schaufeli WB, Leiter MP. Job burnout. Annu Rev Psychol. 2001;52(1):397-422. doi: 10.1146/annurev.psych.52.1.397.
- 19. Yang Y, Hayes JA. Causes and consequences of burnout among mental health professionals: A practice-oriented review of recent empirical literature. Psychotherapy. 2020;57(3):426. doi: 10.1037/pst0000317.

- 20. Jun J, Ojemeni MM, Kalamani R, Tong J, Crecelius ML. Relationship between nurse burnout, patient and organizational outcomes: Systematic review. Int J Nurs Stud. 2021;119:103933. doi: 10.1016/j.ijnurstu.2021.103933.
- 21. Maslach C, Leiter MP. Understanding the burnout experience: recent research and its implications for psychiatry. World Psychiatry. 2016;15(2):103-111. doi: 10.1002/wps.20311.
- 22. Yang S, Liu D, Liu H, Zhang J, Duan Z. Relationship of work-family conflict, self-reported social support and job satisfaction to burnout syndrome among medical workers in southwest China: A cross-sectional study. PLoS One. 2017;12(2):e0171679. doi: 10.1371/journal.pone.0171679.
- 23. Yetgin D, Benligiray S. The effect of economic anxiety and occupational burnout levels of tour guides on their occupational commitment. Asia Pacific J Tourism Res. 2019;24(4):333-347. doi: 10.1080/10941665.2018.1564681.
- 24. Golonka K, Mojsa-Kaja J, Blukacz M, Gawłowska M, Marek T. Occupational burnout and its overlapping effect with depression and anxiety. Int J Occup Med Environ Health. 2019;32(2):229-244. doi: 10.13075/ijomeh.1896.01323.
- 25. Leary T, Miller M. The Toxic Relationship Between Laissez-Faire Leadership and Employee Burnout: No Longer a Well-Kept Secret. Int Leadership J. 2021;13(2).
- McGeary CA, McGeary DD. Occupational burnout. In: Handbook of Occupational Health and Wellness. 2012:181-200. doi: 10.1007/978-1-4614-4839-6_9.
- 27. Khatiban M, Hosseini S, Bikmoradi A, Roshanaei G, Karampourian A. Occupational Burnout and Its Determinants among Personnel of Emergency Medical Services in Iran. Acta Med Iran. 2015;53(11):711-716.
- 28. Raudenská J, Steinerová V, Javůrková A, Urits I, Kaye AD, Viswanath O, Varrassi G. Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic. Best Pract Res Clin Anaesthesiol. 2020;34(3):553-560. doi: 10.1016/j.bpa.2020.07.008.
- 29. Bouza E, Gil-Monte PR, Palomo E, Cortell-Alcocer M, Del Rosario G, González J, Soriano JB. Síndrome de quemarse por el trabajo (burnout) en los médicos de España. Rev Clin Esp. 2020;220(6):359-363. doi: 10.1016/j.rce.2020.02.002.

- 30. Fye HJ, Cook RM, Baltrinic ER, Baylin A. Examining Individual and Organizational Factors of School Counselor Burnout. Prof Counselor. 2020;10(2):235-250. doi: 10.15241/hjf.10.2.235.
- 31. Adriaenssens J, De Gucht V, Maes S. Determinants and prevalence of burnout in emergency nurses: a systematic review of 25 years of research. Int J Nurs Stud. 2015;52(2):649-661. doi: 10.1016/j.ijnurstu.2014.11.004.
- 32. Maslach C, Leiter MP. New insights into burnout and health care: Strategies for improving civility and alleviating burnout. Med Teach. 2017;39(2):160-163. doi: 10.1080/0142159X.2016.1248918.
- 33. Dewi SP, Susanti M. Effect Of Work Overload On Job Satisfaction Through Burnout. J Manajemen. 2021;25(1):56-75. doi: 10.24912/jm.v25i1.703.
- 34. Leep-Hunderfund AN, West CP, Rackley SJ, Dozois EJ, Moeschler SM, Vaa Stelling BE, et al. Social Support, Social Isolation, and Burnout: Cross-Sectional Study of US Residents Exploring Associations With Individual, Interpersonal, Program, and Work-Related Factors. Acad Med. 2022;97(8):1184-1194. doi: 10.1097/ACM.00000000000004709.
- 35. Bagheri-Hosseinabadi M, Ebrahimi MH, Khanjani N, Biganeh J, Mohammadi S, Abdolahfard M. The effects of amplitude and stability of circadian rhythm and occupational stress on burnout syndrome and job dissatisfaction among irregular shift working nurses. J Clin Nurs. 2019;28(9-10):1868-1878. doi: 10.1111/jocn.14778.
- 36. Xie J, Li J, Zhang C, Zhou Y, Luo X, Liu M, et al. Factors Associated With Circadian Rhythm, Job Burnout, And Perceived Stress Among Nurses In Chinese Tertiary Hospitals: A Cross-Sectional Study.
- 37. Seppala E, King M. Burnout at work isn't just about exhaustion. It's also about loneliness. Harv Bus Rev. 2017;29:2-4.
- 38. Tuğsal T. The mediator role of social support amid work-life balance and burnout of employees in the context of coronavirus pandemic precautions and social isolation. Beykent Üniversitesi Sosyal Bilimler Dergisi. 2020;13(1):6-18. doi: 10.18221/bujss.718383.
- 39. Acker GM. Role conflict and ambiguity: Do they predict burnout among mental health service providers? Soc Work Ment Health. 2003;1(3):63-80. doi: 10.1300/J200v01n03 05.
- 40. Vassos MV, Nankervis KL. Investigating the importance of various individual,

- interpersonal, organisational and demographic variables when predicting job burnout in disability support workers. Res Dev Disabil. 2012;33:1780-1791. doi: 10.1016/j.ridd.2012.04.016.
- 41. Laschinger HKS, Borgogni L, Consiglio C, Read E. The effects of authentic leadership, six areas of worklife, and occupational coping self-efficacy on new graduate nurses' burnout and mental health: A cross-sectional study. Int J Nurs Stud. 2015;52(6):1080-1089. doi: 10.1016/j.ijnurstu.2015.03.002.
- 42. Reynolds J. Staff Nurse Perceptions: Exploring Management, Burnout and Patient Safety. [Doctoral dissertation]. doi: 10.17615/wpcg-ce30
- 43. Saks AM, Uggerslev KL, Fassina NE. Socialization tactics and newcomer adjustment: A meta-analytic review and test of a model. J Vocat Behav. 2007;70(3):413-446. doi: 10.1016/j.jvb.2006.12.004.
- 44. Asensio-Martínez A, Leiter MP, Gascón S, Gumuchian S, Masluk B, Herrera-Mercadal P, et al. Value congruence, control, sense of community and demands as determinants of burnout syndrome among hospitality workers. Int Occup Saf Ergon. 2017;25:1-32. doi: 10.1080/10803548.2017.1367558.
- 45. Alfuqaha OA, Al-Olaimat Y, Abdelfattah AS, Jarrar RJ, Almudallal BM, Abu ajamieh ZI. Existential vacuum and external locus of control as predictors of burnout among nurses. Nurs Rep. 2021;11(3):558-567. doi: 10.3390/nursrep11030053.
- 46. Kim H, Kim JS, Choe K, Kwak Y, Song JS. Mediating effects of workplace violence on the relationships between emotional labour and burnout among clinical nurses. J Adv Nurs. 2018;74(10):2331-2339. doi: 10.1111/jan.13731.
- 47. Boland LL, Mink PJ, Kamrud JW, Jeruzal JN, Stevens AC. Social support outside the workplace, coping styles, and burnout in a cohort of EMS providers from Minnesota. Workplace Health Saf. 2019;67(8):414-422. doi: 10.1177/2165079919829154.
- 48. Green AE, Albanese BJ, Shapiro NM, Aarons GA. The roles of individual and organizational factors in burnout among community-based mental health service providers. Psychol Serv. 2014;11(1):41-49. doi: 10.1037/a0035299.
- 49. You X, Huang J, Wang Y, Bao X. Relationships between individual-level factors and burnout: A meta-analysis of Chinese participants. Pers Individ Dif. 2015;74:139-145. doi: 10.1016/j.paid.2014.09.048.

- 50. Roloff J, Kirstges J, Grund S, Klusmann U. How strongly is personality associated with burnout among teachers? A meta-analysis. Educ Psychol Rev. 2022;34(3):1613-1650. doi: 10.1007/s10648-022-09672-7.
- 51. Zawadzka AS, Koscielniak M, Zalewska AM. The big five and burnout among teachers: the moderating and mediating role of self-efficacy. Pol Psychol Bull. 2018;49:149-157. doi: 10.24425/119482.
- 52. Ramirez-Baena L, Ortega-Campos E, Gomez-Urquiza JL, Cañadas-De la Fuente GR, De la Fuente-Solana EI, Cañadas-De la Fuente GA. A multicentre study of burnout prevalence and related psychological variables in medical area hospital nurses. J Clin Med. 2019;8:1-12. doi: 10.3390/jcm8010092.
- 53. Tang CSK, Lim MSM, Koh JM, Cheung FYL. Emotion dysregulation mediating associations among work stress, burnout, and problem gambling: A serial multiple mediation model. J Gambl Stud. 2019;35:813-828. doi: 10.1007/s10899-019-09837-0.
- 54. Ortega-Campos E, Fuente GA, Albendín-García L, Gómez-Urquiza JL, Monsalve-Reyes C, Fuente-Solana EI. A multicenter study of psychological variables and the prevalence of burnout among primary health care nurses. Int J Environ Res Public Health. 2019;16:1-10. doi: 10.3390/ijerph16183242.
- 55. Castillo-Gualda R, Herrero M, Rodríguez-Carvajal R, Brackett MA, Fernández-Berrocal P. The role of emotional regulation ability, personality, and burnout among Spanish teachers. Int J Stress Manag. 2019;26:146-158. doi: 10.1037/str0000098.
- 56. Solmi M, Granziol U, Danieli A, Frasson A, Meneghetti L, Ferranti R, et al. Predictors of stigma in a sample of mental health professionals: network and moderator analysis on gender, years of experience, personality traits, and levels of burnout. Eur Psychiatry. 2020;63(1):e4. doi: 10.1192/j.eurpsy.2019.14.
- 57. Kıral E. The relationship between locus of control and perfectionism perception of the primary school administrators. Procedia-Social and Behavioral Sciences. 2015;174:3893-3902. doi: 10.1016/j.sbspro.2015.01.1130.
- 58. Stoeber J, Damian LE. Perfectionism in employees: Work engagement, workaholism, and burnout. In: Perfectionism, Health, and Well-Being. 2016. pp. 265-283. doi: 10.1007/978-3-319-18582-8_12.
- 59. Deuling JK, Burns L. Perfectionism and workfamily conflict: Self-esteem and self-efficacy

- as mediator. Pers Individ Dif. 2017;116:326-330. doi: 10.1016/j.paid.2017.05.013.
- 60. Dyrbye L, Shanafelt T. A narrative review on burnout experienced by medical students and residents. Med Educ. 2016;50(1):132-149. doi: 10.1111/medu.12927.
- 61. Couser MD, Cutshall DNP, APHNBC H. Developing a course to promote self-care for nurses to address burnout. Online J Issues Nurs. 2020;25(3):1-16. DOI: 10.3912/OJIN.VOI25NO03PPT55.
- 62. Friganović A, Selič P, Ilić B. Stress and burnout syndrome and their associations with coping and job satisfaction in critical care nurses: a literature review. Psychiatr Danubina. 2019;31(suppl. 1):21-31.
- 63. Lee HF, Kuo CC, Chien TW, Wang YR. A meta-analysis of the effects of coping strategies on reducing nurse burnout. Appl Nurs Res. 2016;31:100-110. doi: 10.1016/j.apnr.2016.01.001.
- 64. Danhof-Pont MB, van Veen T, Zitman FG. Biomarkers in burnout: a systematic review. J Psychosom Res. 2011;70(6):505-524. doi: 10.1016/j.jpsychores.2010.10.012.
- 65. Chida Y, Steptoe A. Cortisol awakening response and psychosocial factors: a systematic review and meta-analysis. Biol Psychol. 2009;80(3):265-278. doi: 10.1016/j.biopsycho.2008.10.004.
- Kakiashvili T, Leszek J, Rutkowski K. The medical perspective on burnout. Int J Occup Med Environ Health. 2013;26:401-412. doi: 10.2478/s13382-013-0093-3.
- 67. World Health Organization. WHOQOL: Measuring Quality of Life, WHOQOL-BREF. Retrieved from https://www.who.int/tools/whoqol/whoqol-bref.
- 68. Li X, Jiang T, Sun J, Shi L, Liu J. The relationship between occupational stress, job burnout, and quality of life among surgical nurses in Xinjiang, China. BMC Nurs. 2021:20:1-11.
- 69. Gavelin HM, Domellöf ME, Åström E, Nelson A, Launder NH, Neely AS, Lampit A. Cognitive function in clinical burnout: A systematic review and meta-analysis. Work Stress. 2022;36(1):86-104. doi: 10.1080/02678373.2021.2002972.
- 70. Nevill RE, Havercamp SM. Effects of mindfulness, coping styles, and resilience on job retention and burnout in caregivers supporting aggressive adults with developmental disabilities. J Intellect Disabil Res. 2019;63:441-453. doi: 10.1111/jir.12594.

- 71. Koutsimani P, Montgomery A, Georganta K. The relationship between burnout, depression, and anxiety: A systematic review and meta-analysis. Front Psychol. 2019;284. doi: 10.3389/fpsyg.2019.00284.
- 72. Brand S, Beck J, Hatzinger M, Harbaugh A, Ruch W, Holsboer-Trachsler E. Associations between satisfaction with life, burnout-related emotional and physical exhaustion, and sleep complaints. World J Biol Psychiatry. 2010;11(5):744-754. doi: 10.3109/15622971003624205.
- Bryan C, Goodman T, Chappelle W, Thompson W, Prince L. Occupational stressors, burnout, and predictors of suicide ideation among US Air Force remote warriors. Mil Behav Health. 2018;6(1):3-12. doi: 10.1080/21635781.2017.1325803.
- 74. Giorgi G, Arcangeli G, Perminiene M, Lorini C, Ariza-Montes A, Fiz-Perez J, et al. Work-related stress in the banking sector: a review of incidence, correlated factors, and major consequences. Front Psychol. 2017;8:2166. doi: 10.3389/fpsyg.2017.02166.
- 75. Kim H, Ji J, Kao D. Burnout and physical health among social workers: A three-year longitudinal study. Soc Work. 2011;56:258-268. PMID: 21848090.
- 76. Strikwerda M, Beulens JW, Remmelzwaal S, Schoonmade LJ, van Straten A, Schram MT, et al. The association of burnout and vital exhaustion with type 2 diabetes: A systematic review and meta-analysis. Psychosom Med. 2021;83(9):1013-1030. doi: 10.1097/PSY.00000000000000995.
- 77. Papaefstathiou E, Apostolopoulou A, Papaefstathiou E, Moysidis K, Hatzimouratidis K, Sarafis P. The impact of burnout and occupational stress on sexual function in both male and female individuals: a cross-sectional study. Int J Impot Res. 2020;32(5):510-519. doi: 10.1038/s41443-019-0170-7.
- 78. Toppinen-Tanner S, Ahola K, Koskinen A, Väänänen A. Burnout predicts hospitalization for mental and cardiovascular disorders: 10-year prospective results from industrial sector. Stress Health. 2009;25(4):287-296. doi: 10.1002/smi.1282.
- 79. Leone SS, Huibers MJ, Knottnerus JA, Kant I. The temporal relationship between burnout and prolonged fatigue: a 4-year prospective cohort study. Stress Health. 2009;25(4):365-374. doi: 10.1002/smi.1280.
- 80. Ahola K, Pulkki-Råback L, Kouvonen A, Rossi H, Aromaa A, Lönnqvist J. Burnout and behavior-related health risk factors: results

- from the population-based Finnish Health 2000 study. J Occup Environ Med. 2012;54(1):17–22. doi: 10.1097/JOM.0b013e31823ea9d9.
- 81. Aghilinejad M, Sadeghi Z, Abdullah A, Sarebanha S, Bahrami-Ahmadi A. Role of occupational stress and burnout in prevalence of musculoskeletal disorders among embassy personnel of foreign countries in Iran. Iran Red Crescent Med J. 2014;16(5):e9066. doi: 10.5812/ircmj.9066.
- 82. Bayes A, Tavella G, Parker G. The biology of burnout: Causes and consequences. World J Biol Psychiatry. 2021;22(9):686-698. doi: 10.1080/15622975.2021.1907713.
- 83. Wei H, Aucoin J, Kuntapay G. R., Justice A, Jones A, Zhang C, et al. The prevalence of nurse burnout and its association with telomere length pre and during the COVID-19 pandemic. PLoS One. 2022;17(3):e0263603. doi: 10.1371/journal.pone.0263603.
- 84. Ahola K, Väänänen A, Koskinen A, Kouvonen A, Shirom A. Burnout as a predictor of all-cause mortality among industrial employees: a 10-year prospective register-linkage study. J Psychosom Res. 2010;69(1):51–57. doi: 10.1016/j.ipsychores.2010.01.002.
- 85. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, West CP, Sloan J, Oreskovich MR. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. Arch Intern Med. 2012;172(18):1377–1385. doi: 10.1001/archinternmed.2012.3199.
- 86. Aktan O, Orakcı Ş, Durnalı M. Investigation of the relationship between burnout, life satisfaction, and quality of life in parents of children with disabilities. Eur J Spec Needs Educ. 2020;35(5):679–695. doi: 10.1080/08856257.2020.1748429.
- 87. Rokach A, Boulazreg S. The COVID-19 era: How therapists can diminish burnout symptoms through self-care. Curr Psychol. 2020:1-18. doi: 10.1007/s12144-020-01149-6.
- 88. Miret C, Martínez-Larrea A. The professional in emergency care: aggressiveness and burnout. An Sist Sanit Navar. 2010;33:193-201. PMID: 20508689.
- 89. Wong AM. Beyond burnout: looking deeply into physician distress. Can J Ophthalmol. 2020;55(3):7-16. doi: 10.1016/j.jcjo.2020.01.014.
- 90. Hyman SA, Shotwell MS, Michaels DR, Han X, Card EB, Morse JL, Weinger MB. A survey evaluating burnout, health status, depression, reported alcohol and substance

- use, and social support of anesthesiologists. Anesth Analg. 2017;125(6):2009-2018. doi: 10.1213/ANE.000000000002298.
- 91. Anderson S, Orme S. Mental Health, Illness, Crunch, and Burnout: Discourses in Video Games Culture. In: Proceedings of the 55th Hawaii International Conference on System Sciences; 2022. p. 3133-3140. [Conference paper]
- 92. Ahola K, Toppinen-Tanner S, Seppänen J. Interventions to alleviate burnout symptoms and to support return to work among employees with burnout: Systematic review and meta-analysis. Burnout Res. 2017;4:1-11. doi: 10.1016/j.burn.2017.02.001.
- 93. Rössler W. Stress, burnout, and job dissatisfaction in mental health workers. Eur Arch Psychiatry Clin Neurosci. 2012;262:65-69. doi: 10.1007/s00406-012-0353-4.
- 94. Han SJ, Bonn MA, Cho M. The relationship between customer incivility, restaurant frontline service employee burnout and turnover intention. Int J Hosp Manag. 2016;52:97-106. doi: 10.1016/j.ijhm.2015.10.002.
- 95. Ugwu LI, Enwereuzor IK, Fimber US, Ugwu DI. Nurses' burnout and counterproductive work behavior in a Nigerian sample: The moderating role of emotional intelligence. Int J Africa Nurs Sci. 2017;7:106-113. doi: 10.1016/j.ijans.2017.11.004.
- 96. Bakker AB, Schaufeli WB. Burnout contagion processes among teachers. J Appl Soc Psychol. 2000;30(11):2289-2308. doi: 10.1111/j.1559-1816.2000.tb02437.x.
- 97. Ji D, Yue Y. Relationship between kindergarten organizational climate and teacher burnout: work–family conflict as a mediator. Front Psychiatry. 2020;11:408. doi: 10.3389/fpsyt.2020.00408.
- 98. Harris KJ, Harris RB, Valle M, Carlson J, Carlson DS, Zivnuska S, Wiley B. Technostress and the entitled employee: Impacts on work and family. Inf Technol People. 2022;35(3):1073-1095. doi: 10.1108/ITP-07-2019-0348.
- 99. Allen TD, French KA, Dumani S, Shockley KM. A cross-national meta-analytic examination of predictors and outcomes associated with work–family conflict. J Appl Psychol. 2020;105(6):539–576. doi: 10.1037/apl0000442.
- 100. Mumu JR, Tahmid T, Azad MAK. Job satisfaction and intention to quit: A bibliometric review of work-family conflict and research agenda. Appl Nurs Res.

- 2021;59:151334. doi: 10.1016/j.apnr.2020.151334.
- 101. Dodanwala TC, Santoso DS, Shrestha P. The mediating role of work–family conflict on role overload and job stress linkage. Built Environ Project Asset Manag. 2022;12(6):924-939. doi: 10.1108/BEPAM-12-2021-0153.
- 102. Byron K. A meta-analytic review of work–family conflict and its antecedents. J Vocat Behav. 2005;67(2):169-198. doi:10.1016/j.jvb.2004.08.009.
- 103. Liu T, Zeng X, Chen M, Lan T. The harder you work, the higher your satisfaction with life? The influence of police work engagement on life satisfaction: a moderated mediation model. Front Psychol. 2019;10:826. doi: 10.3389/fpsyg.2019.00826.
- 104. Taylor EA, Huml MR, Dixon MA. Workaholism in sport: A mediated model of work–family conflict and burnout. J Sport Manag. 2019;33(4):249-260. doi: 10.1123/jsm.2018-0248.
- 105. Rupert PA, Stevanovic P, Hunley HA. Work-family conflict and burnout among practicing psychologists. Prof Psychol Res Pr. 2009;40(1):54-61. doi: 10.1037/a0012538.
- 106. Johnson S, Cooper C, Cartwright S, Donald I, Taylor P, Millet C. The experience of work-related stress across occupations. J Manag Psychol. 2005;20:178–187. doi: 10.1108/02683940510579803.
- 107. Zainal N, Zawawi D, Aziz YA, Ali MH. Work-family conflict and job performance: Moderating effect of social support among employees in Malaysian service sector. Int J Bus Soc. 2020;21(1):79-95. doi: 10.33736/ijbs.3224.2020.
- 108. Gradiski IP, Borovecki A, Ćurković M, San-Martín M, Delgado Bolton RC, Vivanco L. Burnout in international medical students: characterization of professionalism and loneliness as predictive factors of burnout. Int J Environ Res Public Health. 2022;19(3):1385. doi: 10.3390/ijerph19031385.
- 109. Obrenovic B, Jianguo D, Khudaykulov A, Khan MAS. Work-family conflict impact on psychological safety and psychological wellbeing: A job performance model. Front Psychol. 2020;11:475. doi: 10.3389/fpsyg.2020.00475.
- 110. Wu G, Wu Y, Li H, Dan C. Job burnout, work-family conflict and project performance for construction professionals: the moderating role of organizational support. Int J Environ

- Res Public Health. 2018;15(12):2869. doi: 10.3390/ijerph15122869.
- 111. Lizana PA, Vega-Fernadez G. Teacher teleworking during the COVID-19 pandemic: Association between work hours, work–family balance, and quality of life. Int J Environ Res Public Health. 2021;18(14):7566. doi: 10.3390/ijerph18147566.
- 112. Hald GM, Ciprić A, Strizzi JM, Sander S. "Divorce burnout" among recently divorced individuals. Stress Health. 2020;36(4):457-468. doi: 10.1002/smi.2940.
- 113. Minnotte KL, Minnotte MC, Bonstrom J. Work–family conflicts and marital satisfaction among US workers: Does stress amplification matter? J Fam Econ Issues. 2015;36:21-33. doi: 10.1007/s10834-014-9420-5.
- 114. Mauno S, Ruokolainen M. Does Organizational Work–Family Support Benefit Temporary and Permanent Employees Equally in a Work–Family Conflict Situation in Relation to Job Satisfaction and Emotional Energy at Work and at Home? J Fam Issues. 2017;38(1):124–148. doi: 10.1177/0192513X15600729.
- 115. Derks D, Bakker AB, Peters P, van Wingerden P. Work-related smartphone use, work-family conflict and family role performance: The role of segmentation preference. Hum Relat. 2016;69(5):1045-1068. doi: 10.1177/0018726715601890.
- 116. Griffith AK. Parental burnout and child maltreatment during the COVID-19 pandemic. J Fam Violence. 2022;37(5):725-731. doi: 10.1007/s10896-020-001722.
- 117. Junça-Silva A, Freire M. The Role of Organizational Climate, and Work–Family Conflict in Burnout: The Case of Teachers. Sustainability. 2022;14(21):13871. doi:10.3390/su142113871.
- 118. Fiorilli C, Schneider B, Buonomo I, Romano L. Family and nonfamily support in relation to burnout and work engagement among Italian teachers. Psychol Sch. 2019;56(5):781-791. doi: 10.1002/pits.22235.
- 119. Siu OL, Kong Q, Ng TK. Psychological capital and family satisfaction among employees: Do occupational stressors moderate the relationship? Int J Environ Res Public Health. 2021;18(22):12260. doi: 10.3390/ijerph182212260.
- 120. Wayne JH, Grzywacz JG, Carlson DS, Kacmar KM. Work–family facilitation: A theoretical explanation and model of primary antecedents and consequences. Hum Resour Manage Rev. 2007;17(1):63-76. doi: 10.1016/j.hrmr.2007.01.002.

- 121. Greenhaus JH, Powell GN. When work and family are allies: A theory of work-family enrichment. Acad Manage Rev. 2006;31(1):72-92. doi:10.5465/amr.2006.19379625.
- 122. McNall LA, Scott LD, Nicklin JM. Do positive affectivity and boundary preferences matter for work–family enrichment? A study of human service workers. J Occup Health Psychol. 2015;20(1):93. doi: 10.1037/a0038165.
- 123. Norling LR, Chopik WJ. The association between coworker support and work-family interference: A test of work environment and burnout as mediators. Front sychol. 2020; 11:819. doi: 10.3389/fpsyg.2020.00819.
- 124. Fu L, Charoensukmongkol P. Effect of cultural intelligence on burnout of Chinese expatriates in Thailand: The mediating role of host country national coworker support. Curr Psychol. 2023;42(5):4041-4052. doi: 10.1007/s12144-021-1728-1.
- 125. Ferguson M, Carlson D, Zivnuska S, Whitten D. Support at work and home: The path to satisfaction through balance. J Vocat Behav. 2012;80(2):299-307. doi:10.1016/j.jvb.2012.01.001.
- 126. Frone MR, Russell M, Cooper ML. Antecedents and outcomes of work-family conflict: Testing a model of the work-family

- interface. J Appl Psychol. 1992;77(1):65-8. doi: 10.1037/0021-9010.77.1.65.
- 127. Aldossari M, Chaudhry S. Women and burnout in the context of a pandemic. Gender Work Organ. 2021;28(2):826-834. doi: 10.1111/gwao.12567.
- 128. Kucuk U, Kucuk HO, Eyuboglu M, Dogan M. eComment. The importance of choosing a proper predictor variable selection method in logistic regression analyses. Interact Cardiovasc Thorac Surg. 2016;22(3):258. doi: 0.1093/icvts/ivv403.
- 129. Maslach C, Leiter MP, Jackson SE. Making a significant difference with burnout interventions: Researcher and practitioner collaboration. J Organ Behav. 2012;33(2):296-300. doi: 10.1002/job.784.
- 130. Fok CCT, Allen J, Henry D. The Brief Family Relationship Scale: A brief measure of the relationship dimension in family functioning. Assessment. 2014;21(1):67-72.

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