

The Impact of Social Support and Burnout on Health Behaviours Among Healthcare Workers

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Submission of Thesis and Dissertation

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Aims: This study aims to explore how perceived social support and burnout affects health behaviours of healthcare workers, focusing on different areas, such as, healthcare utilisation, diet and stress management. Methods: A cross- sectional study was conducted on healthcare workers (n= 74) through a self-reported questionnaire, using the Multidimensional Scale of Perceived Social support (MSPSS) to evaluate social support, the Maslach Burnout Inventory (MBI) to assess burnout dimensions (emotional exhaustion, depersonalisation and personal accomplishment) and a Health Behaviour Inventory (HBI) to measure dietary habits, self- care and stress management. The data was analysed using descriptive, Pearson correlation and Multiple regression in SPSS. Results: The results indicated

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Abstract

Aims: This study aims to explore how perceived social support and burnout affects health behaviours of healthcare workers, focusing on different areas, such as, healthcare utilisation, diet and stress management.

Methods: A cross- sectional study was conducted on healthcare workers (n= 74) through a self-reported questionnaire, using the following scales:

- Multidimensional Scale of Perceived Social support (MSPSS) to evaluate social support.
- Maslach Burnout Inventory (MBI) to assess burnout dimensions (emotional exhaustion, depersonalisation and personal accomplishment)
- Health Behaviour Inventory (HBI) to measure dietary habits, self- care and stress management.

The data was analysed using descriptive, Pearson correlation and Multiple regression in SPSS.

Results: The results indicated that higher perceived social support was positively associated with enhanced healthcare utilisation and self- care behaviours, it did not significantly predict dietary habits. Emotional exhaustion significantly predicted stress- related health risks, such as anger and poor stress management. Depersonalisation and personal accomplishment were not significant predictors of health risk behaviours. Social support did not significantly buffer the effects of burnout on health behaviours.

Conclusion: These findings highlight the need for workplace interventions such as; social support, stress management methods and wellness programs which could enhance healthcare workers well- being as well as improve patient care outcomes.

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Introduction

Working in the healthcare system for many can be incredibly satisfying. It can afford professionals the unique opportunity to support others in times of sickness and ~~sickness-b~~ vulnerability. This in itself can be very fulfilling. Healthcare workers have the potential to not only assist the physical needs of their patients but also in many cases they might provide both emotional and psychological support. This support might also extend beyond the patient to their families often fostering trust, reassurance and empathy (Bodenheimer & Sinsky, 2014).

Working in a high pressure environment, often with long working hours and together with emotional strain can in a lot of cases have serious effects on healthcare workers. Although their work is fundamental, many professionals experience long term stress, which can lead to burnout. Burnout is a condition described as emotional exhaustion, depersonalisation and reduced personal accomplishment (Maslach & Leiter, 2016). In understanding the crucial impact of “burnout”, we might develop strategies to protect our healthcare workers from its negative implications.

Burnout in Healthcare Workers

Defining Burnout

Burnout is understood to be a psychological syndrome caused by prolonged exposure to chronic occupational stress. The term burnout was introduced by Herbert J. Freudenberger in the early 1970's. Freudenberger would regard such physical symptoms such as exhaustion, fatigue, recurring headaches and sleeplessness as being synonymous with burnout. The Maslach Burnout Inventory (MBI) scale is particularly relevant to this study as it encompasses many of the attributes described by Freudenberger. It is made up of emotional exhaustion, which is understood to be the depletion of emotional resources that can lead to feeling extremely fatigued and unable to cope (Maslach et al., 2001). It also cover depersonalisation, which is feeling detached and doubtful towards patients, this can have serious effects on patient

care and trust (Maslach & Leiter, 2016). Lastly MBI also incorporates the idea of reduced personal accomplishment, which can result in feelings of reduced confidence in ones work. This can lead to job dissatisfaction (West et al., 2018).

The Job Demands- Resources (JD-R) illustrates burnout as an imbalance between high job demands, such as workload or emotional strain and job resources such as social support and autonomy. When the job requirements outweigh available resources, burnout rises, which can then lead to negative health outcomes. The JD-R be a valuable tool in creating workplace interventions that can strengthen job resources (Bakker & Demerouti, 2007).

Prevalence & Consequences of Burnout

Burnout is a prevalent problem among healthcare workers, the 2020 Medscape National Physician Burnout and Suicide Report reported a 43% burnout rate among physicians (Medscape, 2020). This is consistent with previous studies, such as De Hert, S. (2020) which found that burnout affects around one in three doctors at any given time. The consequences of burnout among healthcare professionals goes further than just the individual, it is associated with increased rates in medical errors and reduced standards in patient care (Hall et al., 2016). Thus highlighting the importance of identifying the need appropriate intervention and support.

A meta- analysis was conducted to examine the impact of burnout on patient safety. The results revealed that physicians who are experiencing burnout are twice as likely to be involved in patient medical errors. This can also result in the delivery of substandard patient care which has been documented in the patient satisfaction ratings as document by Panagioti et al .(2018). Dyrbye et al. (2008) found that a large number of medical students experiencing burnout were also strongly associated with suicidal ideation compared to the general population. These findings emphasises the incredible pressure healthcare workers can face on a daily bases and the toll burnout can have on their mental well- being.

The Role of Perceived Social Support in Healthcare Workers

Understanding Social Support

Perceived social support is understood to be a person's belief that they maintain supportive relationships which offer emotional support when needed. Numerous research has suggested that the role of support is very important for reducing stress and improving and maintaining well-being (Zimet et al., 1988). Research suggests that different forms of support result in various effectiveness. Emotional support such as empathy and encouragement may help individuals with stress management. On the other hand, instrumental support, for example practical help such as workload modifications can be more beneficial in reducing burnout (Bakker et al., 2007)

Social Support as a Protective Factor Against Burnout

Zimet et al. (1988) developed the Multidimensional Scale of Perceived Social Support (MSPSS), which assesses an individual's beliefs with regards to support from family, friends and significant other. Cohen & Wills (1985) conducted a study to explore the role of social support in reducing stress. The research found that having strong social support networks can serve as a protective factor against stress and can be positively associated with higher levels of resilience. The results indicated that individuals with good perceived social support can have better abilities to interpret stressors. Thus making them appear less threatening. Cohen et al also are much better at problem solving and emotional regulation than those with low levels of perceived social support.

While strong social support networks are usually protective factors against burnout, some studies suggested that overbearing or excessive support can be counterproductive and may increase stress levels rather than alleviate them (Beehr et al., 2010). This stresses the importance of introducing supports that are relevant and appropriate.

Holt-Lunstad et al., (2010) analysed multiple studies to understand more about the relationship between social connections and mortality risk. These results found that individuals with high social support were 50% more likely to live longer compared to those with low levels of social support. This demonstrates the importance in promoting a positive social environment for healthcare professionals. The study by Halbesleben (2006) highlights the need to create positive social networks for healthcare workers. According to these results, promoting social support in medical environments may be a crucial factor in promoting healthy practices such as a well-balanced diet while also a reduced engagement in potentially destructive habits like over reliance on alcohol and other substances.

The Health Struggles of Healthcare Workers

Those working in healthcare can have a unique insight into health and can often be expected to model best practise with regard to healthy lifestyle and practise.

Research by Letvak et al., 2012 suggests that this is not always the case for healthcare workers. The findings suggest that intense work schedules and high stress working environments can result in the decrease of these individuals engaging healthy behaviours. The International Journal of Environmental Research and Public Health (2020) has discovered that healthcare workers have higher rates of unhealthy diet habits, insufficient stress management and a lack of engagement in physical activity. This research further supports the need for the identification of the introduction of supports that are again both relevant and appropriate.

Diet and Nutrition Challenges

As a result of demanding schedules, healthcare workers might be more likely to engage poor eating habits and irregular eating patterns. Long hours, inconsistent shifts and stressful working environments may lead to poor eating choices. This can result in a dependence on processed foods for convenience and the skipping of meals due to high workloads (Patterson et al., 2018). In 2019, a study by Sargent and Thompson found that hospital staff who work night

shifts are especially susceptible to consuming high calorie, nutrient poor foods due to lack of time and poor healthy options.

Substance Use as a Coping Mechanism

Burnout is commonly associated with high rates of substance and alcohol abuse among healthcare workers. In the article “Impaired Healthcare Professional,” Baldisseri mentions that occupational stressors, such as burnout, can result in substance use disorders among healthcare workers (Baldisseri, 2007). West, Dyrbye, and Shanafelt (2018) found that physicians who are experiencing burnout had a 25% increase in alcohol abuse or dependence compare to the general population.

Healthcare Utilisation among Healthcare Professionals

Despite being close to an abundant of healthcare services, research indicates that medical professionals often underutilise these resources, frequently overlooking their own health concerns. According to studies, healthcare professionals are less likely to seek medical help for their physical or mental health issues because they are worried about the stigma they might face associated with their jobs, potential risks on confidentiality and repercussions on their careers (Shanafelt et al, 2011).

According to Wallance et al. (2009), doctors who experience burnout are less likely to take preventative healthcare actions such as, regular medical check-ups and mental supports. Similarly, Vincent et al. (2015) discovered that doctors and nurses frequently self- diagnose and self- medicate, which can result inadequate treatment of illnesses. The general well- being of the healthcare staff may be improved by removing these obstacles and encouraging regular self-care and lowering the stigma attached to seeking medical attention. Working environments were positive relationships are encouraged can help promote those practises.

Additionally, research has shown that prolonged stress and fatigue can lead to a greater dependence on stimulants such as caffeine and in more serious circumstances substance abuse

(Balldisseri, 2007). Despite the knowledge held by those working in the healthcare sector relating to the importance of health practises, Juranic et al. (2017) discovered that 35.1% of healthcare professionals smoke, which could be due to workplace stress, highlighting the need for stress management among healthcare professionals. These factors may not only be affecting their own well-being, but they may also have a negative effect on patient care. It has been documented that professionals who are experiencing burnout may be less productive in their roles (Sonneck & Wagner, 2016).

Interactions Between Burnout, Social Support and Health Behaviour

As discussed indicates that perceived social support and burnout have a major impact on healthcare professionals health behaviours, such as stress management, diet and healthcare utilisation. Burnout is linked to poor mental health, a higher rate of medical errors, and work dissatisfaction among many other detrimental health outcomes (Hall et al., 2016). However, perceived social support is important for stress reduction, resilience and forming health habits (Cohen et al., 1985). Healthcare workers usually struggle to maintain healthy habits due to their demanding work schedules and continuous stress, which can result in bad eating habits, lack of physical exercise, and a disregard for their own personal health (Patterson et al., 2018).

Considering these results, healthcare organisations must focus on creating a support environment that boost social support, lessen burnout, and improve the workplace. Access to mental health resources, the implantation of wellness initiatives and promotion of healthcare use can all enhance healthcare workers well-being and patient care.

The Current Study

Although there is extensive research around burnout and social support in healthcare setting, very few studies have examined how social support influences certain health behaviours, such as diet, healthcare utilisation and stress management. In addition, previous research has focused on overall well-being rather than health related behaviours. Furthermore,

there is only minimal research which has focused on different areas of burnout such as; emotional exhaustion, depersonalisation, and personal accomplishment. The objective of this study is to acknowledge this gap by exploring the role of perceived social support as a protective factor against burnout's negative effect on health behaviours. Insight in to these relationships may facilitate the development of workplace interventions with the aim of improving healthcare workers well- being and enhanced patient care. This study explores the following hypotheses:

- Hypothesis 1 (H1): Higher perceived social support is associated with better diet scores, increased healthcare utilization, and improved self-care.
- Hypothesis 2 (H2): Higher emotional exhaustion and depersonalization and personal accomplishment are associated with increased health risk behaviours (anger/stress, substance abuse).

Methods

Participants

The participants were recruited using a method called opportunistic snowball sampling, researcher started by recruiting a few healthcare workers to complete the survey and then those participants to ask friends and colleagues if they would like to take part. This process continues until sufficient sample size is met. This method allows for a diverse survey population (Atkinson & Flint, 2001). The study originally aimed to recruit 150 participants, due to limitations in recruitment, the final sample size consisted of 74 healthcare professionals. While this is a smaller sample size and may reduce statistical power, it still provides valuable insight exploring the connections burnout, social support and health behaviours. Although the sample size is smaller than planned, this study will include healthcare workers from various roles such as nurses, pharmacists, technicians, laboratory personnel and administrative staff, enhancing the generalisability of the results. Participants will be recruited from different healthcare settings including hospitals, clinics, rehabilitation centres and labs to ensure there is a wide range of perspectives among the participants.

The sample size consisted of 74 healthcare professionals, with a majority identifying as females (62.2%) and males (37.8%).

Measures/Materials

Demographics

The survey asked the participants to provide a variety of demographic information to understand their background and work environment. The data included their age, gender and current status, primary role or position in healthcare, years of employment, type of healthcare setting and typical work shift.

Multidimensional Scale of Perceived Social Support (MSPSS)

Perceived Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPPS), a validated scale commonly used to assess perceived social support, family, friends and significant others. The MSPSS originally consists of 12 items, but this study used a modified 9 items version. The items 4, 5 and 6 were removed to reduce redundancy and survey length. Each item rated on a 5 point Likert Scale, 1 (Strongly Disagree) to 5 (Strongly Agree). The scale will include questions such as, “ There is a special person who is around when I am in need” and “ I can count on my friends when things go wrong”. The MSPSS has demonstrated high reliability and validity across a range of demographics and is especially appropriate for healthcare context. (Zimet, Dahlem, Zimet, & Farley, 1988). The MSPSS was chosen for this study because it is comprehensive yet condensed, allowing for effective evaluation without putting strain on participants.

Burnout Tool

A selection of questions from an established burnout scale were used to measure burnout. It was adapted to measure critical aspects of emotional and psychological burnout that healthcare staff endure. **Emotional exhaustion** was assessed using four items. Sample questions include, “I feel emotionally drained from my work” and “I feel fatigued when I get up in the morning and have to face another day on the job”. These items was measured on a 5 point Likert Scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Emotional exhaustion us a key factor of burnout and has been closely associated with reduced job satisfaction and mental health issues (Maslach, Schaufeli, & Leiter, 2001).

Depersonalization was assessed to gather information about feelings of detachment and dismissive behaviours towards colleagues and patients. It was explored using three items, the questions included, “I feel detached from my patients or colleagues” and “ I’ve become more

callous toward people since I took this job". Responses were rated on a 5- point Likert Scale, 1 (Strongly Disagree), 5 (Strongly Agree).

Emotional and psychological burnout were assessed using the Maslach Burnout Inventory (MBI), as it is the most reliable tool for assessing burnout across various work settings. The chosen items were adapted and simplified to ensure clarity, while also maintaining reliability.

Health Behaviours

This measure was categorised into health promoting behaviours and health risk behaviours. The participants reported their responses on a 5 point Likert scale, 1 (Strongly Disagree) to 5 (Strongly Agree). **Health Promoting Behaviours:** This section of the survey focuses on behaviours that contribute to physical and mental well- being. **Diet:** Items assessed dietary habits that contribute to health, "I limit the amount of sugar in my diet" and "I consume fresh fruit and vegetables". **Self- Care:** Items evaluated protective health measures, such as, "I schedule and attend annual physical exams" and "I perform regular health self- checks (e.g. skin, breast, or testicular). Use of Healthcare Resources: This section assessed the utilisation of healthcare services, with items including, "I go to all my scheduled healthcare appointments" and "I ensure my prescriptions are filled promptly". **Health Risk Behaviours:** This section explores two areas that may have a negative impact on health. Anger and Stress Management: Items included "I get irritated easily in stressful situations (e.g. traffic, waiting in line)". And "I feel overwhelmed when tasks pile up". Reverse scored items like "I manage stress effectively with healthy coping mechanisms" provide an extensive analysis of stress responses. **Substance Use:** Items assessed harmful behaviours that can have a significant impact on physical and mental health. Items included "I abstain from recreational drug use" and "I avoid consuming more than two alcoholic drinks per day".

The use of reverse scored items across the health promoting and health risk behaviours ensure consistency in the participants responses and minimises biases. This detailed methodology allows for a thorough understanding of the participants health related behaviours.

Design

This study involves a quantitative approach and will adopt a cross-sectional design in the survey to explore the relationship between perceived social support, burnout (emotional exhaustion, depersonalization personal accomplishment) and health behaviours among healthcare workers. The cross- sectional survey allows for an objective measurement of these relationships. The independent variables were burnout dimensions and perceived social support and the dependent variables were health promoting behaviours (diet, self- care, health utilisation) and health risk behaviours (anger/stress, substance use).

Procedure

Firstly, this research study was approved by the National College of Ireland's Ethics Committee and adhered to the Psychological Society of Ireland's Code of Professional Ethics (2010) as well as the NCI Ethical Guidelines and Procedures for Research with Human Participants. The survey was made using Microsoft forms, the survey was piloted with 5 participants to ensure it is accessible and clear. The piloted participants were encouraged to give feedback where they feel it is necessary. The pilot study found that the average time to complete the survey was 6 minutes. This Information was then updated in the information Sheet. Initially participants were recruited through social media groups and direct invitations via email, including a brief summary on the purpose of the study and the inclusion criteria, following, was the official link to the survey. They were also encouraged to share the survey with colleagues. The first document displayed on the survey was the Information Sheet, providing the purpose of the study, the inclusion criteria for participation, information about

the confidentiality of the study and important details about their right to withdraw from the study. Participants were informed that they could withdraw from the study at any stage before submitting their responses. However, due to anonymisation, they could not withdraw once they had submitted their survey (see Appendix A).

The next document on the survey in the Consent Form, where participants will be given all the important information again. Participants will have to read and agree by tick boxes before they can continue on with the survey (see Appendix B).

The next page asks the participants about their demographic information, such as, age, gender, employment status, role in healthcare, years of experience, work setting and shift type (see Appendix C). Participants then complete questions of three validated tools: the Multidimensional Scale of Perceived Social Support (MSPSS), the Burnout Tool, and the Health Behaviour Inventory (HBI). The MSPSS will assess levels of perceived support from family, friends, and significant others. The Burnout Tool will measure emotional exhaustion, depersonalization, and personal accomplishment. The HBI will evaluate participants health promoting and health risk behaviours (see Appendix D). The final page includes a Debriefing Sheet again outlining the purpose of the study and thanking individuals for their participation in the study. Additionally, support resources are provided such as Mental Health Ireland for individuals who may feel distress after participation (see Appendix E).

Data Analysis

The data was analysed using SPSS. Firstly, descriptive statistics were used to gather demographic information from the participants. Pearson correlation analyses was used to examine the relationships between perceived social support, burnout and health behaviours. In addition, multiple linear regression analyses was carried out to evaluate whether burnout

dimensions (emotional exhaustion, depersonalisation and personal accomplishment)

significantly predicted health risk behaviours (anger/ stress, substance use).

Results

Descriptive statistics

A total of 74 healthcare workers participated in this study. Table 1 presents the descriptive statistics for the continuous variables. The participant's ages range between 20 to 61 years, ($M = 37.70$, $SD = 12.25$), with an average of 12.08 years of healthcare experience ($SD = 12.25$). Perceived social support was significantly high ($M = 35.12$, $SD = 6.07$), while emotional exhaustion ($M = 10.89$, $SD = 3.33$) and depersonalization ($M = 10.36$, $SD = 2.52$) displayed moderate levels.

Table 1

Descriptive Statistics for continuous variables (N=74)

Variable	<i>M</i> [95% CI]	<i>SD</i>	Min	Max
Demographics				
Age (years)	37.7	12.3	20.0	61.0
Years worked in healthcare	12.1	10.4	1.0	43.0
Independent Variables				
Perceived Social Support	35.1	6.1	17.0	45.0
Emotional Exhaustion	10.9	3.3	4.0	20.0
Depersonalisation	10.4	2.5	3.0	15.0
Personal Accomplishment	11.0	2.0	6.0	15.0
Dependent Variables				
Diet Score	9.0	2.5	4.0	15.0
Self- Care	5.6	2.0	2.0	10.0
Healthcare Utilisation	14.4	3.3	4.0	20.0
Health Risk (Anger/Stress)	8.1	2.5	3.0	13.0
Health Risk (Substance Abuse)	11.6	2.8	4.0	15.0

Note: M = Mean; SD = Standard deviation

Table 2 displays the frequencies and percentages for categorical variables. The majority of healthcare workers were females at 62.2%, while males at 37.2%. The majority of participants were employed full time (71.6%) with the highest percentage working in hospital setting (37.8%).

Table 2

Frequencies for Categorical Variables (N=74)

Variable	Frequency	Valid %
Gender		
Male	28	37.8
Female	46	62.2
Type of Shift		
Full Time	53	71.6
Part Time	18	24.3
Temp/Locum	3	4.1
Current Role		
Doctor	2	2.7
Nurse	14	18.9
Medical Tech	14	18.9
Administrative Staff	13	17.6
Allied Professional	17	23.0
Other	14	18.9
Healthcare Setting		
Hospital	28	37.8
Clinic	7	9.5

Out Patient	1	1.4
Public Health	13	17.6
Lab	14	18.9
Pharmacy	11	14.9

Inferential Statistics

Pearson's Correlation Analysis

Table 3 presents the Pearson's correlation coefficient for the key study variables. Personal accomplishment was significantly correlated with perceived social support ($r = .29, p < .01$), suggesting that individuals with higher personal accomplishment tend to report greater perceived social support. Emotional exhaustion ($r = .23, p < .05$) and depersonalisation ($r = .25, p < .05$) also showed weak to moderate positive correlation with perceived social support.

Table 3

Pearson's Correlation Table (n= 74)

Variable	1.	2.	3.	4.
1. Perceived Social Support	1.00			
2. Emotional Exhaustion	.23*	1.00		
3. Depersonalisation	.25*	.33*	1.00	
4. Personal Accomplishment	.29**	.14	.21*	1.00

Note: $p < .05$, $p < .01$ (one tailed)

Hypothesis 1 (H1): Perceived Social Support and Health Behaviours

Multiple Regression Analysis Predicting Perceived Social Support

A multiple linear regression analysis was conducted to examine whether burnout dimensions (*emotional exhaustion, depersonalisation, and personal accomplishment*) predict perceived social support among healthcare workers.

The overall regression model was statistically significant, $F(3,70)=3.829, p=.013$, indicating that the predictors collectively explain 14.1% of the variance in perceived social support ($R^2 = .14$).

Regression Coefficients

Table 3 presents the unstandardized (B) and standardized (β) regression coefficients, among with their respective significant levels. The results indicate personal accomplishment significantly predicted perceived social support ($B = 0.706, SE = 0.343, \beta = 0.234, t(70) = 2.060, p = .04$) suggesting that higher levels of personal accomplishment are associated with greater perceived social support.

In contrast, emotional exhaustion ($B = 0.268, SE = 0.214, \beta = 0.147, t(70) = 1.249, p = .216$) and depersonalisation ($B = 0.337, SE = 0.287, \beta = 0.156, t(70) = 1.311, p = .194$) was not significant predictors of perceived social support.

These finding suggest that while burnout negatively affect perceived social support, personal accomplishment may serve as a protective factor in mitigating its impact.

Table 4

Multiple Regression Predicting Perceived Social Support

Variable	R^2	B	SE	β	t	p
(Constant)	.14	20.51	4.41	-	4.65	<.001
Emotional Exhaustion		0.27	0.21	0.15	1.25	.22
Depersonalisation		0.38	0.29	0.16	1.31	.19
Personal Accomplishment		0.71	0.34	0.23	2.06	0.4

Note: $R^2 = .14$, , $F(3, 70) = 3.83$, $p = .013$.

Hypothesis 2 (H2): Burnout and Health Risk Behaviours

A multiple linear regression analysis was conducted to examine whether burnout dimensions (*emotional exhaustion*, *depersonalisation*, *personal accomplishment*) predict health risk behaviours (*anger/stress*, *substance abuse*).

The model predicting anger and stress was statistically significant, $F(3, 70) = 6.82$, $p < .001$, explaining 23% of the variance ($R^2 = .23$). Emotional exhaustion was a significant predictor ($B = 0.36$, $SE = 0.08$, $\beta = 0.49$, $t(70) = 4.38$, $p < .001$), indicating that higher emotional exhaustion was associated with greater levels of anger and stress. However, depersonalisation ($p = .713$) and personal accomplishment ($p = .891$) were not significant.

Table 5

Regression Analysis for Burnout Predicting Health Risk Behaviours

Variable	R^2	B	SE	β	t	p
Health Risk (Anger/Stress)	.23					
Emotional Exhaustion		0.36	0.08	0.49	4.38	<.001
Depersonalisation		-0.04	0.11	-0.04	-0.37	.713
Personal Accomplishment		-0.02	0.13	-0.03	-0.14	.891
Health Risk (Substance Abuse)	.12					
Emotional Exhaustion		0.10	0.10	0.12	1.01	.316
Depersonalisation		0.18	0.14	0.16	1.36	.180
Personal Accomplishment		0.29	0.16	0.200	1.77	.080

Note:

Discussion

The focus of this study is to understand the impact perceived social support and burnout has on health behaviours such as healthcare utilisation, diet and stress management among healthcare workers. The outcomes of this study provide meaningful insight into these complex relationships, aiming to improve well-being among healthcare professionals. This research conducted explores the following:

- Hypothesis 1: perceived social support associated with better diet scores, increased healthcare utilisation and improved self-care and
- Hypothesis 2: emotional exhaustion and depersonalisation and personal accomplishment predict health risk behaviours such as anger, stress and substance abuse.

The sample size of healthcare workers included of 74 participants, with the vast majority identifying female at (62.2%) and male at (37.8). This is consistent with the trends among healthcare settings where women make up a considerable quantity of the workforce. This sentiment has also been echoed by information compiled by WHO (2019) where women occupied a significant number of positions in the fields of allied health and nursing.

Perceived Social Support and Health Behaviours

An important finding of this study was that perceived social support was positively correlated with healthcare utilisation and self-care behaviours. This demonstrates that people were more likely to seek medical care and take care of their own needs if they feel they have strong social relations (Holt-Lunstad et al., 2010).

In examining the two hypothesis set out in this study, it was observed that high score of perceived social support scale did not significantly predict diet scores. Conversely, Halbesleben (2006) reported that participants with strong social support were more likely to engage in healthy behaviours including diet choices. One explanation for this dissimilarity is that social support may to a stronger predictor for health seeking behaviours whereas dietary habits may be greatly influenced by environmental factors such as there accesses to healthy food options. Healthcare workers often operate in high stress environments where their work schedules can be typically erratic. These demanding schedules may result in limited opportunities to avail of breaks which in turn may make it more challenging to engaging in healthy eating habits such as consuming fresh produce over convince food (Navruz Varlı & Mortaş, 2024).

Burnout and Health Risk Behaviours

This study found that emotional exhaustion was a strong predictor of stress related health risks; especially anger and stress management difficulties. Prior research has found that burnouts can lead to poor emotional regulation, higher levels of anxiety and distress. This aligns with the findings cited by Maslach & Leiter, (2016) and West et al., (2018) . Research conducted by Dyrbye et al, (2018) on emotional exhaustion has shown it is linked to; distrust, reduced professional efficacy and decline in job satisfaction. The forementioned can likely all be associated with negative coping strategies.

In exploring Hypothesis H1 and Hypothesis H2 it would surprisingly seem that depersonalisation and personal accomplishment were not significant predictors of stress related health risks. This could suggest that emotional exhaustion may be the most influential factor for engagement in unhealthily behaviours. This correlates with De Hert (2020) research where it was found that emotional exhaustion was the biggest predictor for mental health problems while depersonalisation and personal accomplishment played a lesser role.

Additionally, burnout was not a significant predictor of substance use, although depersonalisation showed a weak association. These results differ from previous study where it was shown that a strong relationship existed between burnout and increased alcohol/ drug dependence (Baldisseri, 2007). A possible reason for those observations is that burnout alone may not be the cause of substance use, other factors such as workplace culture or coping strategies may also play a role (Ng & Jeffery, 2003). It is important to consider that due to stigma and professional repercussions it may be very possible that substance use may be underreported and as such may be difficult to tangibly quantify this influence.

The Role of Social Support as a Buffer Against Burnout

A key hypothesis in this study was that perceived social support would lessen the relationship between burnout and health risk behaviours. However, the results indicated that social support was associated with better health utilisation. It did not significantly buffer the negative effects of burnout on health behaviours.

One possible reason for these results might be that the sample population measured social support from family, friends and significant others. It did not maybe take into account social support/dimensions that may exist in the workplace for example peer support/ professional resources.

The results were somewhat surprising, considering that prior research suggested that strong social support might decrease the impact of work stress and promote resilience among healthcare professionals (Halbesleben, 2006). One explanation for these findings may be that having support from family and friends is beneficial but may not be sufficient to completely negate the effects of burnout (Maslach & Leiter, 2016). Previous studies have suggested that support in the workplace, for example, support from colleagues, may be more effective than emotional support from family or friends as already mentioned (Halbesleben, 2006).

Another likely reason for the limited buffering effect of social support as received from family and friends is that the impact may differ across the sample population. Studies have demonstrated that not all types of social support are effective. Strong social connections in the work place may be more beneficial for healthcare workers working in high stress environments due to commonality of experience and pressures compared to social support from workers in non-healthcare environments, albeit it is noted that interaction with non-healthcare professionals can help with promoting diversity of thought and a more rounded perspective. More research is needed to understand the specific types of social support that are more effective in decreasing burnout related health risks. The MSPSS (Multidimensional Scale of Perceived Social Support) used in the study focuses on family, friends and significant others. Further studies might include questions surrounding work place social support may have been more beneficial for having a better understanding on the effects of social support.

Implications

The findings suggested that emotional exhaustion was a significant predictor of increased stress related health behaviours. Interventions that are effective at reducing burnout should be put in place to lessen this risk. According to research programs incorporating mindfulness and workload management might be effective in improving well-being among physicians (Krasner et al., 2009).

Since the results seem to indicate that burnout is linked to poor health behaviours, a good idea might be to implement workplace wellness programs as it could benefit increasing healthy behaviours among healthcare workers. Introducing schemes such as providing nutrition and health options in hospital canteens might prove beneficial (Levy et al., 2012).

Strengths and limitations

This study has numerous strengths. It addresses a serious concern in healthcare, how burnout and social support can effect health behaviours in workplace. Additionally, although prior research has explored burnout and social support largely, this study focuses particularly on their impact on health behaviours, providing targeted insights for intervention methods.

The findings provide empirical evidence about the role of social support in reducing the effects of burnout, thus contributing to the current research on workplace stress and healthcare professionals well-being. The study utilized trusted and well established scales, such as the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1988) and the Maslach Burnout Inventory (Maslach & Leiter, 2016), to guarantee that the findings are reliable.

However, there are also various limitations to review. One significant limitation to consider is the sample size, as the study originally aimed to recruit 150 participants but in the end only included 74 healthcare workers. This may have resulted in the results not being as strong or reliable as they would be with a larger sample, possibly reducing statistical power. In addition, because participants were recruited using a snowball sampling technique, there is a chance of sampling bias as all individuals may share common back backgrounds and experiences. Further research might consider should recruit a larger sample size to allow for a more diverse range of professionals.

Another limitation is the cross sectional design, which only highlights the relationship between burnout, social support and health behaviours, it is not clear what directly caused these results. To understand these relationships a longitudinal study might be conducted to see how burnout changes their behaviour over time.

Additionally, the use of a self-reported survey means that the results may be subject to bias. Due to concerns surrounding stigma, participants may have down played there unhealthy behaviours such as substance use, stress levels or poor diets (Shanafelt et al.,

2011). To migrate this limitation, further studies might include, objective health assessments to accurately understand participants health behaviours without the risk of biases.

Conclusion

In conclusion, this study demonstrates that emotional exhaustion is an essential predictor of stress related health risks among healthcare workers. Although social support improves healthcare utilisation, it does not seem sufficient to decrease the negative effects on stress management or diet. These results highlight the importance of identifying workplace intervention that expand further than social support. Strategies such as mental health programs and wellness based projects to promote well-being while also providing a supportive environment for healthcare professional might also be considered.

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Appendices

Appendix A

Information Sheet

how do healthcare worker's levels of perceived social support and burnout influence their health behaviours?

You are being invited to take part in a research study. Before deciding whether to take part, please take the time to read this document, which explains why the research is being done and what it would involve for you. If you have any questions about the information provided, please do not hesitate to contact me using the details at the end of this sheet.

What is this study about?

I am a final year student in the BA in Psychology programme at National College of Ireland. As part of our degree we must carry out an independent research project.

The aim of this study is to investigate how do healthcare worker's levels of perceived social support and burnout influence their health behaviours. The measures used in this study will address health related behaviours, including about your diet and physical health checks.

Why have I been invited to participate?

You have been invited because you are a healthcare worker, and your experiences and perspectives are valuable to understanding how healthcare professionals approach their own health care.

What will happen if I take part in this study?

If you agree to participate, you will be asked to complete a survey. The survey will ask about:

- Some demographics, including age, gender and type of healthcare work.
- Your perceived levels of social support, questions about burnout followed finally by questions about attitudes, beliefs and behaviours related to health. Some questions about your health will ask you directly about your behaviour (disagree to agree).

For example: *"I take prescription medication only as directed by a health care provider."* and *"I limit the amount of red meat I eat."*

- The survey should take approximately **10-15 minutes** to complete. Your participation is entirely voluntary, and you can choose to skip any questions or stop at any time.

Who can take part?

Inclusion Criteria: You can participate in this study if you meet the following criteria:

- Currently employed in the healthcare sector in Ireland.
- You are aged 18 years or older.

- You are able to give informed consent and understand the survey questions.

Do I have to take part?

Your participation is entirely voluntary. You can withdraw from the study at any time without any consequences. If you decide to withdraw, this can be done by simply existing out of their browser. One you have submitted your questionnaire, it will not be possible to withdraw your data from the study, because the questionnaire is anonymous and individual responses cannot be identified.

What are the possible risks and benefits of taking part?

- **Risks:** Participation in this study involves minimal risk. You may experience some discomfort when answering questions about your own personal health. Contact information for relevant support services are also provided at the end of the questionnaire.
- **Benefits:** While there are no direct benefits to you, your participation may contribute to a better understanding of the challenges healthcare workers face when managing their own health

Will taking part be confidential and what will happen to my data?

The questionnaire is anonymous, it is not possible to identify a participant based on their responses to the questionnaire. All data collected for the study will be treated in the strictest confidence.

What will happen to the results of the study?

Anonymised data will be stored on NCI servers in line with NCI's data retention policy. It is envisaged that anonymised data will also be uploaded to a secondary data repository to facilitate validation and replication, in line with Open Science best practice and conventions.

The results of this study will be presented in my final dissertation, which will be submitted to National College of Ireland. Results may be presented at a conference.

Who should you contact for further information?

If you have any concerns or feel that the research has not been carried out as described, you may contact my supervisor, Dr Conor Thornberry at conor.thornberry@ncirl.ie.

Appendix B

Consent form

Note that this should follow the information sheet:

In agreeing to participate in this research I understand the following:

- The method proposed for this research project has been approved in principle by the Departmental Ethics Committee, which means that the Committee does not have concerns about the procedure itself as detailed by the student. It is, however, the above-named student's responsibility to adhere to ethical guidelines in their dealings with participants and the collection and handling of data.
 - If I have any concerns about participation, I understand that I may refuse to participate or withdraw at any stage by exiting my browser.
 - I understand that once my participation has ended, that I cannot withdraw my data as it will be fully anonymised.
 - I have been informed as to the general nature of the study and agree voluntarily to participate.
 - All data from the study will be treated confidentially. The data from all participants will be compiled, analysed, and submitted in a report to the Psychology Department in the School of Business.
 - I understand that my data will be retained and managed in accordance with the NCI data retention policy, and that my anonymised data may be archived on an online data repository and may be used for secondary data analysis. No participants data will be identifiable at any point.
 - At the conclusion of my participation, any questions or concerns I have will be fully addressed.
-
- ☐ Please tick this box if you have read, and agree with all of the above information.
 - ☐ Please tick this box to indicate that you are providing informed consent to participate in this study.

Appendix C

Demographic Questions

1. Age

How old are you?

Text box

2. Gender

What is your gender?

- Male
- Female
- Non- Binary
- Prefer to self- describe: _____

3. Employment Status in Healthcare

What is your current employment status in the healthcare field?

- Full- time healthcare worker
- Part- time healthcare work
- Temporary or locum healthcare work

4. Role in Healthcare

What is your primary role or position in healthcare?

- Doctor
- Nurse
- Medical technician
- Administrative staff
- Allied health professional (e.g. physiotherapist, occupational therapist)
- Other (please specify)

5. Years of experience in healthcare

How many years have you worked in healthcare?

Text box

6. Work setting

In which type of healthcare setting do you primarily work?

- Hospital
- Clinic
- Outpatient facility
- Public health organisation
- Lab
- Pharmacy

7. Shift type

What type of shift do you typically work?

- Day shift
- Night shift
- Rotating shifts
- On call

- Other (please specify)

Appendix D Scales

Scale 1: Burnout

APA PsycTests®

Burnout Assessment Tool--Ultra-Short Version

APA PsycTests Citation:

Hadžibajramovi, E., Schaufeli, W., & De Witte, H. (2024). Burnout Assessment Tool--Ultra-Short Version [Database record]. Retrieved from APA PsycTests. doi: <https://dx.doi.org/10.1037/t92124-000>

Instrument Type:
Screener

Test Format:

All items are rated on a five-point frequency-based scale with response alternatives: never, rarely, sometimes, often, and always.

Source:

Adapted from: Hadžibajramovi, Emina, Schaufeli, Wilmar, & De Witte, Hans. (2024). The ultra-short version of the Burnout Assessment Tool (BAT4)—Development, validation, and measurement invariance across countries, age and gender. PLoS ONE, Vol 19(2). doi: <https://dx.doi.org/10.1371/journal.pone.0297843>. © 2024 The Author(s). Reproduced under a Creative Commons Attribution 4.0 International License (<https://creativecommons.org/licenses/by/4.0/>).

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Scale 2: The multidimensional Scale of Perceived Social Support (MSPSS)

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
 Circle the "2" if you **Strongly Disagree**
 Circle the "3" if you **Mildly Disagree**
 Circle the "4" if you are **Neutral**
 Circle the "5" if you **Mildly Agree**
 Circle the "6" if you **Strongly Agree**
 Circle the "7" if you **Very Strongly Agree**

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Strongly Agree
1. There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2. There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3. My family really tries to help me.	1	2	3	4	5	6	7
4. I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5. I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6. My friends really try to help me.	1	2	3	4	5	6	7
7. I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8. I can talk about my problems with my family.	1	2	3	4	5	6	7
9. I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10. There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11. My family is willing to help me make decisions.	1	2	3	4	5	6	7
12. I can talk about my problems with my friends.	1	2	3	4	5	6	7

Screenshot

Scoring Information:

To calculate mean scores:

Significant Other Subscale: Sum across items 1, 2, 5, & 10, then divide by 4.

Family Subscale: Sum across items 3, 4, 8, & 11, then divide by 4.

Friends Subscale: Sum across items 6, 7, 9, & 12, then divide by 4.

Total Scale: Sum across all 12 items, then divide by 12.

Scale 3: Health Behaviour Intentory**HBI-20**

Directions: This questionnaire contains 20 statements. The statements are about your health, your behaviors, and your attitudes and beliefs. Please complete the questionnaire by circling the number which indicates your level of agreement or disagreement with each statement, using the scale below.

Give only one answer for each statement.

1. I avoid chips and fried foods.

1. Strongly Disagree
2. Disagree
3. Slightly Disagree
4. Unsure
5. Slightly Agree
6. Agree
7. Strongly Agree

2. I limit the amount of red meat I eat.**3. I limit the amount of fat I eat.****4. I limit the amount of salt I eat.****5. I avoid eating large amounts of sugar.****6. I get angry and annoyed when I am caught in traffic.****7. I get irritated and mad when waiting in lines.****8. Things build up inside until I lose my temper.****9. I conduct a testicular/breast exam every month.****10. I check my skin for unusual spots or coloring every few months.**

11. I have physical exams every year.

12. I have dental exams every year.

13. I get my blood pressure checked every year.

14. I go to all my scheduled health care appointments.

15. I consult a health care provider right away when I have unfamiliar physical symptoms.

16. I take prescription medication only as directed by a health care provider.

17. I fill my medicine prescriptions immediately.

18. I use tobacco products.

19. I drink more than 2 alcoholic drinks per day.

20. I use recreational drugs.

Scoring:

- Items reflect both health risk behaviors and health-promoting behaviors. These former items are reverse coded so that high scores on all items indicate a greater degree of health promotion. These are items: 6-8 and 18-20.
- A total scale score is obtained by summing participants' responses and dividing by the number of items (20), after reverse coding items.
- There are five factors, three that reflect health-promoting behaviors (diet [five items: 1, 2, 3, 4, and 5], preventive self-care [three items: 9, 10, 11], and proper use of health care resources [six items: 12, 13, 14, 15, 16 and 17], and two that reflect health risk behaviors (anger and stress [three items: 6, 7, and 8], and substance use [three items: 18, 19, and 20]). Subscale scores are obtained by summing participants' responses and dividing by the number of items, after reverse coding items, so that high scores on all subscales indicate a greater degree of health promotion.

Appendix E Debrief Sheet

Thank You for Participating!

We appreciate your time and input in this study on how healthcare worker's levels perceived social support and burnout, influence their health behaviour

Purpose of the Study:

The aim of this study is to investigate how perceived social support and burnout relate to health-related attitudes, beliefs and behaviours among healthcare workers.

Confidentiality:

Your responses are completely anonymous and confidential. No personal information will be shared or linked to your responses.

Support Resources:

If you feel distressed or need someone to talk to after completing the survey, please reach out to the following mental health resources:

- **Mental Health Ireland:** (01 284 1166), will provide a listening service, give any information or advice, and provide emotional support.

Questions or Concerns:

If you have any questions about the research, you can contact the researcher at x22439952@student.ncirl.ie. If you have any concerns or feel that the research has not been carried out as described, you may contact my supervisor, Dr Conor Thornberry at conor.thornberry@ncirl.ie.

Thank you again for your valuable contribution to this important research.

