

Resilience And Job Satisfaction Among Paramedics in The Saudi Red Crescent Authority: A Cross-Sectional Study

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Abstract

Both resistance and job satisfaction of paramedics are necessary factors in ensuring healthy and effective employees. Therefore, the purpose of this cross-sectional study was to examine the relationship between paramedics' resilience with their job satisfaction and identify the demographic predictors of these variables among paramedics working at the Saudi Red Crescent Authority. Questionnaires included demographics, resilience (Connor and Davidson Resilience Scale), and job satisfaction (Minnesota Satisfaction Questionnaire) were filled by the 300 participating paramedics. The mean resilience score was 58.14 ± 4.66 representing moderate level of resilience. The average mean job satisfaction score was 39.38 ± 3.85 . The percentage of low and moderate job satisfaction paramedics were 40.3% and 59.7 %. Pearson correlation analysis also showed that resilience has a positive correlation with job satisfaction with a coefficient value of 0.20 and $p < 0.01$. In addition, there was no a significant relationship between age, marital status and resilience, and job satisfaction. The results of multiple regression analysis also established job satisfaction as a significant predictor of resilience, accounting for 4% of the variance in resilience, ($t = 2.69$, $p < 0.05$). The results indicate that better level of resilience is related to higher levels of job satisfaction of paramedics. The unit reflected that conducting stress and resilience training, creating supportive workplace cultures might improve paramedics' quality of life and job satisfaction ultimately enhancing patient outcomes. More large-scale research is required to investigate the efficacy of activities for enhancing resilience and job satisfaction among workers in this study.

Keywords: Resilience, Job Satisfaction, Paramedics, Saudi Red Crescent Authority

Introduction

Health is a resource that allows people to fulfil their full potential and contribute to the advancement of society. Adopting a positive viewpoint and striking a balance between preventive measures and attempts aimed at enhancing the health of individuals and communities is crucial when it comes to health in work-related contexts (Cassetti et al., 2020). One of these behaviours is the ability to bounce back from adversity, which is defined as a collection of innate qualities shared by all people (Eakman et al., 2019; Ramirez-Granizo et al., 2020). Resilience is one of several components that make up health in work environments (Delgado et al., 2020;

Feng et al., 2017). According to (Fredrickson et al., 2020), resilient individuals exhibit pleasant emotions even under pressure and show a keen interest in everything that occurs in their lives.

A vital resource of health systems are medical personnel. In work-related settings, health enables individuals to meet professional obstacles by supporting their ability to adjust to demanding work environments, control their emotions, create coping mechanisms, enhance their well-being, and advance their careers (Foster et al., 2018). Similarly, other writers have coined the phrase "professional resilience" to describe the capacity to adjust to shifting conditions, especially in the face of potentially dangerous ones (Sommer et al., 2016). More research is needed on the topic, particularly on the study of resilience among emergency medical care professionals who provide care outside of hospitals, as evidenced by the expanding body of research on the topic of resilience among health care professionals.

In today's busy and demanding workplace, resilience has emerged as a critical component for both employee success and wellbeing. This is particularly noticeable in high-stress sectors like the oil and gas industry. Most employees in the oil and gas sector deal with a variety of stressful situations, pressures, and obstacles on a daily basis, all of which have an adverse effect on their health (King et al., 2016; Malik & Garg, 2018).

Resilience is a multifaceted attribute that describes an individual's character traits that allow them to flourish when faced with hardship (Charney, 2004; Connor & Davidson, 2003; Davidson et al., 2005). It has also been defined as an individual dynamic phenomena that depends on context and can enhance the quality of healthcare services by lowering stress connected to work and enhancing well-being (Flanagan & Flanagan, 2002). According to (Grant & Kinman, 2014; Mcdonald et al., 2016), resilience helps people deal with their work-related challenges by promoting emotion regulation, coping strategy development, adaptability to stressful situations, enhanced wellbeing, and personal development (Stephens, 2013).

Although conceptual models of psychological resilience in nurses have been presented, most of them concentrate on personal traits rather than aspects related to the workplace (Foureur et al., 2013; Gillespie et al., 2007; Rees et al., 2015). Because of this, research on the development of resilience processes and the variables influencing the performance of people exposed to unfavorable circumstances is crucial (Ribeiro et al., 2011). Several variables can raise the resilience of emergency medical personnel working outside of hospitals and enhance the quality of their care. According to (Froutan et al., 2015), emergency personnel' resilience and quality of care were found to be enhanced by a number of these aspects, including scene safety and security, decision-making, self-efficacy, and religious support.

Resilience is an effective strategy to improve employees' well-being because it is the capacity to deal with stressful situations effectively (Hart et al., 2014) and lessens the negative consequences of workplace stressors (Heritage et al., 2019; Ren et al., 2018).

The ability to bounce back from failure, adversity, or conflict is a frequent definition of resilience. It also holds true for accomplishments, advancement, and taking on more responsibility. Therefore, resilient workers are more aware of their surroundings and possess the flexibility, improvisation, and quick-change adaptation skills (Malik & Garg, 2018). Workplace outcomes such as engagement, contentment, and performance are positively impacted by resilience (Geldenhuys et al., 2014; Meintjes & Hofmeyr, 2018; Srivastava & Madan, 2020). Employees that are resilient may develop a pattern of problem-solving that best suits their needs at work. Furthermore, resilient people are adept at handling challenges at work, resulting in tenacious and positive work attitudes that foster engagement (Chikobvu & Harunavamwe, 2022).

Moreover, resilience affects worker job satisfaction in addition to acting as a protective element. Positivity regarding one's work because of one's assessment and perception of it is known as job satisfaction. The productivity and motivation of employees are directly correlated with its level (Piotrowski et al., 2022).

Studies on resilience have concentrated on how it can raise patient satisfaction and care quality (Hart et al., 2014). The sympathetic nervous system is one example of a physiological element that influences resilience. Other internal and environmental factors that affect resilience include self-efficacy and inner wisdom, therapeutic settings, social networks, and demographic factors like age and years of experience (Manomenidis et al., 2019; Turner & Kaylor, 2015).

Resilience has been positively correlated with overall well-being, job satisfaction, job retention, and social support, according to recent research (Yu et al., 2019). The physical, emotional, and professional well-being of paramedics is negatively impacted by occupational pressures and heavy workloads. These factors also cause poor job satisfaction, high turnover, and poor practice, which in turn adds to the workload of surviving paramedics and perpetuates the cycle of burnout. Resilience breaks this cycle, whereas violence intensifies it.

The purpose of this study was to determine how resilience affects paramedics' job satisfaction to benefit healthcare professionals and enhance the standard of patient care. Because paramedics deal with a lot of psychological strain and stress, they need to strengthen their resilience to deal with obstacles, unpleasant situations, and unfavourable working environments. Our findings should regulate and avoid work departure,

manage job satisfaction, and enhance staff members' health and well-being. The purpose of the current study was to ascertain how resilience and work satisfaction relate to one another.

Study problem

The paramedic profession is known for its demanding and dangerous work environment with regards to occupational risks and safety. As a result, workers in this industry usually face complex challenges like meeting tight safety regulations and operating under extreme pressure.

To guarantee patient and professional safety, service management unifies the efforts of all healthcare professionals and oversees clinical practice and care quality. Their contributions are essential to organizing emergency and organizational responses during a crisis. Paramedics that work outside of hospitals are more vulnerable to mental health issues than the public because of their line of work. For instance, moderate levels of stress were indicated by 74% of Iranian emergency medical care personnel (Seyedjavadi et al., 2014). It is imperative to maintain and enhance the mental well-being of emergency medical personnel who work outside of hospitals, as this affects not only the healthcare providers but also the community they serve (Halpern et al., 2009).

It has been shown that building resilience and a positive psychological well-being among staff members is essential to overcoming these challenges and stress. It is critical to protect industry experts' safety, well-being, and operational efficiency.

Research question

- What is the association between Resilience and job satisfaction among paramedics in the Saudi red crescent authority?
- How do demographic factors (such as age, marital status, education level, and work experience) influence resilience and job satisfaction among paramedics?

Research objectives

- To determine the association between Resilience and job satisfaction among paramedics in the Saudi red crescent authority.
- To determine how demographic factors (such as age, marital status, education level, and work experience) influence resilience and job satisfaction among paramedics

Literature review

To find out how workplace interventions affect nurses' job satisfaction, a meta-analysis was carried out. The main goal of the interventions was education, and it was discovered that they were successful in raising job satisfaction (Niskala et al., 2020).

This study made clear how important it is to think about putting into practice efficient measures to raise health care workers' job satisfaction. Employees that score higher on resilience and innovative thinking are more satisfied with their jobs and are more able to handle hardship (Golparvar et al., 2013).

Employee resilience and work engagement are positively correlated, according to a study done in Indonesia among 205 respondents who work as merchandisers for fast-moving consumer goods under outsourcing corporations ($r = 0.346$, $p < 0.01$). The results demonstrated that workers with high resilience levels typically show higher levels of engagement at work (Wiroko & Sugiharti, 2022).

Additionally, a study by Bernard (2021) that looked into the relationships between resilience, job satisfaction, and expected turnover among chief nursing officers across the country discovered that there was a strong correlation—a positive correlation coefficient of 0.28—between resilience and job satisfaction (Bernard, 2021).

Methodology

Given the nature of the current study topic (Resilience and job satisfaction among paramedics in the Saudi red crescent authority). To achieve the study objectives, the researcher used the descriptive method, which is: the type of research by which all members of the research community or a large sample of it are questioned; with the aim of describing the phenomenon being studied in terms of its nature and degree of existence. (Al-Assaf, 2016, p. 211).

Study Community

The current study community consists of all Paramedics in the Saudi Red Crescent Authority

Study Sample

The origin of scientific research is to be conducted on all members of the research community; because this is more likely to confirm the results, but the researcher resorts to choosing a sample of them if this is not possible due to their large number, for example" (Al-Assaf, 2003, p. 96); therefore, the researcher chose a random sample, where the sample amounted to (300) Paramedics in the Saudi Red Crescent Authority.

Research tools

Based on the nature of the data and the methodology followed in the study, the researcher found that the most appropriate tool to achieve the objectives of this study is (the questionnaire). The study tool was built by referring to the literature and previous studies related to the subject of the study.

Demographic information questionnaires, the Connor and Davidson Resilience Scale, and the Minnesota Satisfaction Questionnaire were used to collect information.

Demographic information questionnaire included age, marital status, level of education, work experience, employment status, type of ward and answers to these questions

Connor and Davidson Resilience Scale

Twenty-five items on a five-point Likert scale, from zero (not true at all) to four (true almost all of the time), make up the Connor and Davidson Resilience Scale. Higher scores suggest greater resilience; the mean resilience score is 50 (Torgheh et al., 2015). These ratings provide a number between 0 and 100. The test's developers have confirmed the test's validity (convergent and divergent validity, factor analysis approach) in both normal and at-risk groups. The reliability coefficient obtained from the retest procedure after a 4-week interval was 0.87 (Connor & Davidson, 2003). Mohammadi (2005) standardized and validated this measure, which demonstrated strong validity and reliability. The reliability was assessed using the Cronbach's alpha method, and the reliability coefficient came out to be 0.89. With the exception of item 3, we computed the correlation between each score and the overall score to ascertain its validity. The results showed coefficients ranging from 0.41 to 0.64. The main components analysis was then used to examine the scale items. We computed the components using the KMO index and Bartlett test of sphericity prior to extracting them in accordance with the correlation matrix. The Bartlett's test of sphericity yielded a chi-square value of 5556.28 and a KMO value of 0.87, respectively, which both accounted for the sufficient evidence for factor analysis computation (Mohammadi, 2005).

Minnesota Satisfaction Questionnaire

Nineteen items on a five-point Likert scale (strongly disagree, disagree, uncertain, agree, and strongly agree) make up the Minnesota Satisfaction Questionnaire. Numbers between 19 and 38 represent low job satisfaction, numbers between 38 and 57 represent moderate job happiness, and scores over 57 represent extremely good job satisfaction. The dependability coefficients that were found were generally high. The coefficients for the intrinsic satisfaction scale ranged from 0.91 for engineers to 0.84 for the two assembler groups. The extrinsic pleasure scale coefficients for engineers and machinists ranged from 0.77 to 0.82. The coefficients for the general satisfaction scale ranged from 0.87 for assemblers to 0.92 for engineers. For intrinsic satisfaction, the median reliability coefficient was 0.86, for extrinsic satisfaction, it was 0.80, and for general satisfaction, it was 0.90 (Martins & Proença, 2014). This questionnaire, which is used to gauge satisfaction with nursing, management, production, service, and education, has positive validity and reliability, according to a few studies. Using the retest approach, the guide for the main version of the questionnaire reported a reliability value of 0.89 and verified the content validity (Sharifi, 2016). Hajibabae used the content validity method to confirm the correctness of their reported reliability of 0.82 (Hajibabae et al., 2016). Using the Cronbach's alpha coefficient and face and content validity, Hadizadeh Talasaz verified the dependability of 0.86 (Hadizadeh, 2014).

Study implementation procedures:

The questionnaire was sent to Paramedics in the Saudi Red Crescent Authority, where the researcher converted the questionnaire to electronic in order to collect the largest possible amount of the study sample, where the researcher distributed the questionnaire and after examining it, the researcher obtained (300) questionnaires valid for statistical analysis, after which the data was entered and processed statistically by computer using the (SPSS) program, and then the researcher analyzed the data and extracted the results.

Statistical processing methods:

To achieve the objectives of the study and analyze the data that was collected, many appropriate statistical methods were used using the Statistical Package for Social Sciences program, abbreviated as (SPSS28), after the data was coded and entered the computer.

To characterize the research variables, frequency, percentage, mean, and standard deviation were employed. The Kolmogorov-Smirnov test, skewness, and Kurtosis were employed to verify that the data was distributed normally. To verify that the variances were equal, Levene's test was employed. Bivariate studies using analysis of variance, independent t-test, and Pearson correlation coefficient were conducted since the parametric requirement was satisfied. The resilience predictors were examined using multiple linear regression. We analysed the data using SPSS26. A significance level of less than 0.05 was used.

Results

The samples' mean age was 32.06 ± 5.56 years, with a minimum age of 24 and a maximum age of 46. There were 6.39 ± 4.18 years of work experience on average. Most of the samples had fewer than five years of job experience, were married, and had diplomas.

Table 1: The relationship between demographic characteristics, resilience and job satisfaction

Variable	Frequency (%)	Resilience		Statistical test (P-value)	Job satisfaction		Statistical test (P-value)
		Mean	SD		Mean	SD	
Age (yr)				F = 1.29 (0.28)			F = 0.48 (0.62)
24–30	146 (48.7)	58.20	4.41		39.38	3.78	
30.1–35	65 (21.7)	57.38	4.56		39.02	3.99	
> 35	89 (29.7)	58.60	5.09		39.63	3.87	
Marital status				t = -0.30 (0.76)			t = 0.96 (0.34)
Single	165 (55.0)	58.07	4.50		39.57	3.87	
Married	135 (45.0)	58.23	4.86		39.14	3.80	
Education level				t = -0.31(0.75)			t = -1.47(0.14)
Diploma	252(84.0)	58.10	4.68		39.23	3.71	
Master's degree	48(16.0)	58.33	4.61		40.13	4.46	
Work experience				F = 1.37(0.26)			F = 0.25(0.78)
1–5	154(51.4)	58.12	4.49		39.45	3.84	F
5.1–10	88(29.3)	57.65	4.58		39.14	3.79	
> 10	58(19.3)	58.95	5.16		39.53	4.0	
Employment				F = 0.31(0.87)			F = 0.40(0.81)
Hired	222(74.0)	58.63	4.85		39.67	3.81	
Contract recruiter	78(26.0)	57.91	4.73		39.48	3.94	
Relatives' death				t = 1.88(0.06)			t = 1.07(0.29)
Yes	113(37.7)	58.79	4.66		39.68	4.01	
No	187(62.3)	57.75	4.63		39.19	3.74	

The average resilience score was greater than the questionnaire's midpoint, at 58.14 ± 4.66 [15]. Every dimension's mean was reasonably near to one another (Table 2). Each sample exhibited a moderate level of resilience. Table 2 displays the mean work satisfaction score, which was 39.38 ± 3.85 . Between 40.3% (n = 121) and 59.7% (n = 179) of the paramedics expressed poor and moderate job satisfaction, respectively.

Table 2: Description of resilience, job satisfaction and their dimensions in paramedics

Variable		Minimum	Maximum	Mean	SD	Mean per item
Resilience	Personal competence	14	24	18.83	2.03	2.35
	Trust in one's instincts, tolerance of negative affect	10	21	15.91	2.08	2.27
	Positive acceptance of change and secure relationships	6	15	11.72	1.70	2.34
	Control	4	9	7.0	1.25	2.33
	Spiritual influences	2	6	4.69	0.86	2.34
	Total	45	71	58.14	4.66	2.04

Variable		Minimum	Maximum	Mean	SD	Mean per item
Job satisfaction	Pay	4	9	6.11	0.85	2.13
	Career type	5	12	8.52	1.51	2.11
	Development opportunities	3	9	6.34	1.31	2.10
	Organizational atmosphere	2	6	4.21	1.06	2.17
	Leadership style	5	12	8.67	1.44	1.84
	Working condition	3	9	5.52	1.49	2.04
	Total	28	49	39.38	3.85	

Table 3 shows that there is a positive or poor relationship between paramedics' resilience, job satisfaction, and some of its dimensions (trust in one's own instincts, tolerance of negative affect, positive acceptance of change and secure relationships, and spiritual influences). Higher resilience is associated with higher job satisfaction. We found no evidence of a significant correlation between age, marital status, and resilience, nor between age and job satisfaction (Table 1).

Table 3: The relationship between resilience, its dimensions, and job satisfaction in paramedics

Variable	Job satisfaction	
	Pearson coefficient	p-value
Resilience		
Personal competence	0.10	0.08
Trust in one's instincts, tolerance of negative affect	0.16	0.006
Positive acceptance of change and secure relationships	0.15	0.01
Control	0.06	0.27
Spiritual influences	0.12	0.04
Total	0.21	< 0.001

To investigate how demographic factors might predict resilience, we further tested several regression models using a stepwise strategy. The model included all variables (job satisfaction and relatives' deaths) that had a P value of less than 0.2 in the bivariate analysis (Tables 1 and 3). The model only included job satisfaction, which explained 4% of the variance in resilience ($p < 0.05$) (Table 4).

Table 4: The multiple regression analysis summary for resilience among the paramedics

Variable	B	SE ^a	β	T	P	95% CI Lower	95% CI Upper	Adjusted R ²
Constant	48.19	2.72		17.75	< 0.001	42.85	53.54	0.04
Job satisfaction	0.25	0.07	0.21	3.68	< 0.001	0.12	0.39	

^aStandard error; Data were presented as multiple regression analysis. Only significant results were shown; CI Confidence intervals for B

Discussion

Consequently, the results of this study shed light on the relationship between organizational resilience and job satisfaction factors of the Saudi Red Crescent Authority paramedics. Because emergency medical services are both challenging and frequently characterized by heightened stress, knowledge of these processes is important to improving employee satisfaction and patient outcomes.

Resilience and Job Satisfaction

Exploratory analysis noted positive relationship between resilience, suggest that paramedics with higher levels of resilience tends to report greater levels of job satisfaction. This is in line with prior research

indicating that resilience means lower vulnerability to job demands that, in turn, lead to enhanced work environment. Resources of resilient people include the strength to handle stress, proper emotional control leading to self-control, as well as positive thinking that would ultimately increase job satisfaction.

Influence of Demographic Variables

In a rather surprising fashion, participants' demographic characteristics such as their age, marital status or the level of education achieved did not present any relationship with their levels of resilience, nor their levels of job satisfaction. The results of this study indicate that resilience may therefore be more evenly determined by personal and organizational coping styles and not the demographic factors. The implications are clear and recommend the implementation of protective factors for the population irrespective of their diversity.

Implications for Practice

Therefore, the findings of this study are vast for healthcare management and policy implications. Due to the level of stress that is found among paramedics; the use of resilience training may be useful. It means it is possible to teach some of the stress management techniques that will help any given paramedic to be better placed in handling stress, this will improve satisfaction while in the job and thus enhance their general well-being. In the same respect, flexibility at the organizational level, like possibilities of mentorship and peer support in the organization, might also help develop sources of strengths in the paramedics employees through an emphasis on group cohesion and morale.

However, the study is not without its limitations, as the following sections will point out. However, the cross-sectional method limits the notion of causality; therefore, future studies in a longitudinal form should investigate change in resilience and job satisfaction in this population. Furthermore, qualitative research could assist in enriching these findings by giving quantitative information of paramedics' experiences of the use of resilience strategies and satisfaction in their job.

Further research can also acknowledge the possible intervention strategies which can help to increase the resilience of operators and evaluate the effectiveness of the specified interventions regarding to new job satisfaction and mental health results of paramedic. Exploring these relationships across different cultural orient within emergency services may give better understanding on how organisational practices can be enhanced internationally.

Conclusion

New perspective of research indicated that the role of resilience in optimizing the job satisfaction of the paramedics of the Saudi Red Crescent Authority is highly impactful. It can be as embracing programmes to increase the resilience of staff and creating work environments that are more supportive to diversity and differences in health care systems will help to give employee satisfaction which in turn leads to enhanced practice for the patient. It is essential not only to create conditions for the further professional growth of paramedics and to strengthen preventive measures to address mental health issues with the representatives of such an essential branch as the emergency medical services.

Research Limitations

Despite the valuable insights gained from this study, there are some limitations that should be noted:

- **Generalizability:** The study focused solely on Saudi Arabia, and the results may not be fully generalizable to other regions or healthcare organizations.
- **Sample Size:** Although the sample was representative of paramedics in the region, a larger sample size across different regions or organizations could provide more comprehensive results.
- **Self-Reported Data:** The reliance on self-reported data from paramedics may introduce bias, as respondents may have provided socially desirable answers or may not have fully understood some questions.
- **Limited Variables:** The study focused on Resilience and job satisfaction among paramedics in the Saudi red crescent authority.

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