



The effect of compassion on psychological resilience: a study of healthcare professionals

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Abstract

Healthcare professionals must be compassionate when providing care to patients. When the scientific studies are examined, it is clearly stated that the psychological resilience of the health workers who witness the bad events experienced by the patients is affected. This study aimed to reveal the state of compassion and psychological resilience in health workers. The study was conducted online with 328 people from 7 regions of Turkey with different socio-demographic characteristics with snowball sampling method. In our findings, it was determined that there was a weak negative significant relationship between compassion and psychological resilience. Accordingly, it can be said that as their state of compassion increases, their psychological resilience decreases. It was also found that the compassion levels of health workers were moderate. As a result, it is recommended to organize and maintain training programs to strengthen the psychological resilience of health workers who are trying to provide compassionate care under intense and stressful working conditions.

Keywords Health Workers · Mercy · Compassion · Psychological Resilience

Introduction

"Compassion is a feeling that revives the human spirit lost within us and reminds us of our fundamental humanity." (Sayar, 2018)

Compassion can be described as a cognitive process that entails active involvement in comprehending the underlying mechanisms of pain, accompanied by a motivation to mitigate the suffering experienced by others. It is characterized by empathic actions aimed at offering support. Compassionate

individuals display empathic responses, engaging in actions that provide assistance to those in distress. Such actions may encompass the implementation of tangible measures aimed at alleviating or mitigating the experience of pain (Gilbert, 2005). Compassion has been defined by Sprecher and Fehr (2005) as empathic (compassionate) love. Empathic (compassionate) love is described as an attitude that encompasses behaviors, cognitions, and emotions, aiming to support individuals in their difficult times and when they are in need (İşgör, 2017). Compassion is a complex psychosocial response, indicative of heightened sensitivity and empathy towards the suffering of others. It involves a receptiveness to solution-focused approaches and a genuine aspiration to improve the overall well-being of the afflicted individual (Bray et al., 2014; Perez-Bret et al., 2016).

Compassion is an exceptional socio-emotional value, instrumental in ameliorating the distress experienced by individuals and fostering their overall well-being and welfare (Bray et al., 2014; Perez-Bret et al., 2016; Bloomfield & Pegram, 2015). Hospitals serve as environments where patients and their families encounter emotionally demanding situations, grappling with feelings of powerlessness, and where the role of compassion assumes paramount importance (Dalgali & Gürses, 2018). Consequently, it is of utmost significance for healthcare professionals to exhibit

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the affective disposition of compassion throughout their provision of care services for patients, encompassing both diagnostic evaluations and treatment procedures (Polat & Erdem, 2017). Compassion exerts a notable influence on healthcare workers' intrinsic motivation to aid patients, especially in response to the arduous events and hardships that patients encounter during their medical journey (Polat & Erdem, 2017). Death, physical injuries and illnesses, aging, losing loved ones, and loneliness are various situations where individuals suffer. It can be said that pain plays a significant role in evoking compassion. Healthcare professionals frequently witness such sufferings due to the nature of their work (Cingel, 2009). Moreover, the act of delivering healthcare services to patients is correlated with adverse psychological consequences, including but not limited to burnout, secondary traumatic stress, and post-traumatic stress disorder (Figley, 2002; Şirin & Yurttas, 2015). The favorable consequences arising from this process can be elucidated by the theoretical construct of "compassion satisfaction" (Polat & Erdem, 2017). In a research investigation conducted by Yeşil (2010) examining the psychological well-being and coping strategies of emergency medical personnel, it was observed that healthcare professionals exposed to violent incidents, witnessed fatalities, engaged in interventions for severe bodily injuries, experienced child deaths, and encountered human attacks demonstrated elevated levels of symptoms associated with traumatic stress.. Adaptation disorder refers to the condition where healthcare professionals experience symptoms such as stress, tension, and agitation as a result of witnessing their patients' traumas and being exposed to their difficult moments. This disorder, unrelated to medical causes, has been associated with low mood, crying, hopelessness, anxiety, and depression (DSM-5, 2013).

The ability of individuals to be psychologically resilient and gain new skills by turning challenging life events into opportunities supports the concept of psychological resilience (Basım & Çetin, 2011). Psychological resilience is defined as the ability to adapt, recover, find meaning, cope with adversity, and continue one's life in a normal manner in the face of negative experiences and risks (Masten, 2001; Rutter, 2006; Arslan, 2015; Oz, 2009; Fisher et al., 2019; IJntema et al., 2021). Psychological resilience is influenced by factors such as intelligence, flexible personality, self-control orientation, high self-esteem, and self-efficacy. Additionally, characteristics such as self-awareness, autonomy, effective problem-solving, positive thinking, and social competence are also important (Gizir, 2004, 2007; Güngörüş et al., 2015).

Healthcare professionals may need to display not only compassionate and gentle approaches but also firm and strong attitudes in certain situations when providing care to patients (Dalgali & Gürses, 2018). Skovholt (2012) also suggests that healthcare workers can protect themselves from negative effects while maintaining an empathetic attitude

by not disregarding their own well-being. Furthermore, it has been emphasized that professionals involved in trauma intervention or providing assistance need to possess skills that enhance and develop their psychological resilience. Scientific studies indicate that professional or volunteer healthcare workers who provide psychosocial support to traumatized individuals inevitably bear witness to the life events of patients and are likely to exhibit symptoms similar to post-traumatic stress (Bonach & Heckert, 2012; Yılmaz & Şahin, 2007; Bride et al., 2007; Bride & Kintzle, 2011; Hatcher et al., 2011; Salston & Figley, 2003). When examining studies related to compassion, it is observed that the concept of compassion fatigue is more prevalent (Sökmen & Taşpınar, 2021; Şeremet & Akıncı, 2021; Şirin & Yurttas, 2015; Tanrikulu & Ceylan, 2021). These empirical investigations suggest that healthcare professionals undergoing compassion fatigue are susceptible to emotional exhaustion, work-related stress, and adverse effects on both their physical and psychological well-being (Cocker & Joss, 2016).

For healthcare professionals, the cultivation of compassion during the provision of patient care, effective coping with challenging circumstances, and fostering personal growth are imperative. Notably, the existing literature lacks specific studies that investigate the interrelation between the constructs of compassion and psychological resilience in this context (Tanrikulu & Ceylan, 2021; Gündüzoğlu et al., 2019). From this perspective, it is hypothesized that the outcomes of this study hold the potential to yield a substantial and meaningful contribution to the respective scientific field.

The the purpose of this research is to assess the levels of compassion and psychological resilience among healthcare practitioners. The research posits the following hypotheses:

1. There exists a statistically significant relationship between compassion and psychological resilience in healthcare workers.
2. A statistically significant correlation is observed between sociodemographic characteristics of healthcare providers and the compassion scale.
3. Statistically significant variations are evident in the Psychological Resilience measure and sociodemographic factors among healthcare practitioners.

Materials and methods

Material method The study was carried out between May 1st and October 1st, 2021, with the primary objective of investigating the levels of compassion and psychological resilience within the healthcare professional community. A total of 328 participants from 7 distinct regions, characterized by diverse sociodemographic attributes, willingly took part in the research through an online snowball sampling

method. Based on G-Power analysis, it was determined that a minimum of $n = 316$ data points were required, considering a 0.05 error margin and an 85% confidence interval. Data collection was conducted online, utilizing the Google Forms application, and subsequently stored in an Excel spreadsheet to ensure data integrity. To prevent duplicate entries, encryption measures were implemented in the survey. Employing a quantitative data collection technique, the researchers conducted a pilot study involving 10 individuals before commencing the main study. During the scale analysis, the Cronbach's Alpha coefficient was calculated to be 0.901, demonstrating high reliability of the questionnaire.

Data collection tools

sociodemographic data A form consisting of 6 questions was developed by the researcher to describe the sociodemographic characteristics of the participants based on the literature review conducted (Akdeniz & Deniz, 2016; İsgör, 2017).

Compassion Scale (CS) The Compassion Scale (CS) was created by Pommier (2010) and validated in Turkish by Akdeniz and Deniz (2016). This 24-item scale aims to measure individuals' levels of compassion. The scale utilizes a 5-point Likert scale ranging from 1 (never) to 5 (always). Higher scores on a scale ranging from 24 to 120 indicate higher levels of compassion. The Cronbach's Alpha reliability coefficient of the scale was determined as 0.85. Following three-component model of self-compassion, Pommier (2010) claimed that compassion is based on kindness, shared experience awareness, and conscious awareness. The six subscales that make up the scale are: kindness (6, 8, 16, 24), shared experience awareness (11, 15, 17, 20), conscious awareness (4, 9, 13, 21), callousness (2, 12, 14, 18), detachment (3, 5, 10, 22), and disengagement (1, 7, 19, 23). Calculation involves reversing the callousness, detachment, and disengagement subscales. The next step is to determine the mean of the final scores. Higher scores reflect higher levels of compassion. In this study, the Cronbach's Alpha value of the CS was determined as 0.86 (Akdeniz & Deniz, 2016).

Brief Psychological Resilience Scale (BPRS) Smith et al. (2010) developed the Psychological Resilience Scale (PRS) to measure individuals' psychological resilience. Dogan (2015) conducted reliability and validity studies of the scale in Turkey. The BPRS is a self-report measurement tool consisting of six items structured in a five-point Likert scale format. When the components of the scale (2, 4, and 6) are reversed, higher scores on the scale indicate higher levels of psychological resilience. The internal consistency reliability coefficient was found to be between 0.80 and 0.91 (Dogan, 2015).

Data analysis

The research data underwent statistical analysis using the SPSS Windows 27.0 software suite. Descriptive statistics, including counts, percentages, means, standard deviations, as well as minimum and maximum values, were employed to summarize the data. The Shapiro–Wilk test was utilized to assess the normality of the data distribution. For non-normally distributed variables, the Mann–Whitney U test and Kruskal–Wallis test were employed to perform comparisons. Regression analysis and Spearman's correlation test were used to investigate the relationships between continuous variables exhibiting non-normal distributions. A significance threshold of 0.05 was applied to determine statistically significant differences. On April 30, 2021, the Artvin Coruh University Research Ethics Committee granted approval for the research project with the reference number E-18457941–050.99–10,590.

Results

Table 1 displays the demographic information of the health-care workers who took part in the study. The data reveals that 75.6% of the participants were female ($n = 248$), 26.8% fell within the age range of 26 to 30 ($n = 88$), 64.6% were

Table 1 Sociodemographic Characteristics

Sociodemographic Data	N	%
Gender		
Woman	248	75.6
Male	80	24.4
Age		
20–25	52	15.9
26–30	88	26.8
31–35	56	17.1
36–40	56	17.1
41–45	44	13.4
46–50	12	3.7
51 and over	20	6.1
Marital Status		
Married	212	64.6
Single	116	35.4
Profession		
Doctor	150	45.7
Nurse	148	45.1
Midwife	30	10.2
Work Year		
1–5	130	39.6
6–10	54	16.5
11–15	76	23.2
16–20	28	8.5
21 years and over	40	12.2

married (n = 212), 45.7% held the occupation of doctors (n = 150), and 23.2% had accumulated 11 to 15 years of work experience.

Table 2 presents the total scores obtained by the participating healthcare professionals in our study. According to the results, the average score for the Psychological Resilience scale, which does not have a cutoff point and ranges from a minimum of 6 to a maximum of 36, was calculated as 21. It was determined that the total score obtained by healthcare professionals on the Psychological Resilience

scale (18.0 ± 1.7) was lower than the calculated average score. Therefore, The psychological resilience might be said to of healthcare professionals is below the moderate level. The total score obtained by the participating healthcare professionals on the Compassion scale was determined as 73.8 ± 5.4 . Since the scale does not have a cutoff point and ranges from a minimum of 24 to a maximum of 120, the average total score was calculated as 72. Therefore, it can be said that the healthcare professionals in our study have a moderate level of compassion.

Table 3 displays the comparisons of the total scores obtained by healthcare professionals in our study from the Compassion scale and the Psychological Resilience scale.

The findings show that the overall scores from the Compassion scale varied significantly depending on the gender of the subjects. Females (79.7 ± 5.3) were found to have a higher level of compassion than males (73.0 ± 5.6) ($p < 0.05$). The total scores from the Compassion scale showed significant differences across the various professional categories, with doctors having the lowest level (78.4 ± 5.1) and midwives having the greatest level (103.2 ± 2.4) ($p < 0.05$).

According to the participants' gender, there was a notable distinction between the overall scores from the Psychological Resilience scale, with females scoring lower (17.7 ± 1.1) than males scoring higher (19.5 ± 1.4) ($p < 0.05$). Between

Table 2 Total Scores from Psychological Resilience Scale and Compassion Scale

Ölçekler	n	Min–Max	Sdt ± Ort
Psychological Resilience Scale (PSÖ)	328	12–23	18.0 ± 1.7
Compassion Scale (CS)	328	62–87	73.8 ± 5.4
Mercy	328	7–20	15.9 ± 3.5
Sharing awareness	328	8–20	15.9 ± 3.2
Conscious awareness	328	9–20	15.8 ± 2.8
Recklessness	328	4–20	8.8 ± 4.2
Disconnection	328	4–20	8.8 ± 4.3
Breaking a relationship	328	4–17	8.4 ± 3.7

Table 3 Comparison of the Mean of the Total Scores of the Compassion Scale and the Psychological Resilience Scale According to the Sociodemographic Characteristics of the Participants

Sociodemographic Data	N	%	Compassion Scale Total Score	p	Total Score of the Psychological Resilience Scale	p
Gender						
Woman	248	75.6	79.7 ± 5.3	0.000*	17.7 ± 1.1	0.025*
Male	80	24.4	73.0 ± 5.6		19.5 ± 1.4	
Age						
20–25	52	15.9	72.8 ± 5.5	0.542	17.6 ± 2.0	0.135
26–30	88	26.8	74.4 ± 5.1			
31–35	56	17.1	74.8 ± 5.4			
36–40	56	17.1	74.1 ± 4.9			
41–45	44	13.4	74.5 ± 5.6			
46–50	12	3.7	73.5 ± 7.0			
51 and over	20	6.1	75.1 ± 5.8			
Marital Status						
Married	212	64.6	73.8 ± 5.9	0.938	18.0 ± 1.7	0.646
Single	116	35.4	74.1 ± 5.4			
Profession						
Doctor	150	45.7	78.4 ± 5.1	0.000**	20.2 ± 1.4	0.001**
Nurse	148	45.1	98.7 ± 5.4			
Midwife	30	10.2	103.2 ± 2.4			
Work Year						
1–5	130	39.6	73.6 ± 5.5	0.070	17.6 ± 1.6	0.001**
6–10	54	16.5	73.4 ± 4.9			
11–15	76	23.2	74.3 ± 5.1			
16–20	28	8.5	72.6 ± 4.9			
21 years and over	40	12.2	73.0 ± 6.7			

$p < 0.05$, *Mann Whitney U test, ** Kruskal Wallis Test

different occupational groups, there were significant differences in the overall Psychological Resilience scale scores ($p < 0.05$). The psychological resilience of midwives was the lowest (17.3 ± 1.2), whereas that of doctors was the highest (20.2 ± 1.4) ($p < 0.05$). The Psychological Resilience scale total scores were significantly different depending on the research year, and it was observed that participants with 21 or more years of work experience had the highest level of psychological resilience (19.8 ± 1.5). Based on the age and marital status of the healthcare workers in our study, no significant variations in total scores on the Compassion and Psychological Resilience measures were discovered ($p > 0.05$).

Table 4 presents the correlation between the Compassion scale and the Psychological Resilience scale. According to the results, low significance negative correlation was found between the Compassion scale and the Psychological Resilience scale ($r = -0.334$; $p = 0.037$). Therefore, one could describe it as compassion increases, psychological resilience decreases.

A measure utilized to assess the model's significance is the F value, as presented in Table 5. The model demonstrates statistical significance at the 0.01 level, with an F value of 12.410. Furthermore, the R-square value, representing the coefficient of determination, is reported as 0.152 in Table 5's regression analysis, while the corrected R-square value is determined to be 0.135. These values indicate the proportion of variance in the dependent variable that can be elucidated by the independent variables. Specifically, the independent factors within the compassion model account for only 15.2% of the variance observed in the dependent variable. This aligns with the correlation analysis, supporting the notion of a weak association between the variables.

Discussion

The findings of the research conducted to assess the compassion and psychological resilience of healthcare professionals have been discussed in line with the relevant literature. The study revealed that the compassion levels of healthcare workers were moderate. In contrast to our study, Tanrıku and Ceylan (2021) stated in their research that nurses working in pediatric clinics had high levels of compassion. Gündüzoğlu et al. (2019) and Çingöl et al. (2018) found in their studies on nursing students that their levels of compassion were high. It is believed that the difference that emerged might be due to the participants in the study having different professions. Additionally, it has been observed that there has been an increase in scientific studies related to the concept of compassion in recent years, with a majority of these studies being conducted on nursing students and focusing on the concept of compassion fatigue.

In our study, it was found that the psychological resilience levels of healthcare professionals were below the moderate level. Throughout the data collection phase of the study, it was discerned that our country experienced a significant surge in COVID-19 cases, and concomitantly, nurses exhibited diminished levels of psychological resilience amidst this period (Labrague & de Los Santos, 2021). Analogous investigations involving healthcare workers have consistently reported moderate levels of psychological resilience (Deniz et al., 2020; Türkmen & Doğan, 2021; Karacaoğlu & Köktaş, 2016). In contrast to our study, similar research conducted in our country has indicated that healthcare professionals working in

Table 4 The relationship between compassion scale and psychological resilience scale score averages

		Compassion Scale (CS)	Psychological Resilience Scale (PRS)
Compassion Scale (CS)	r	1	-0.334
	p		0.037*
Psychological Resilience Scale (PRS)	r	-0.334	1
	p	0.037*	

r: Spearman Rank correlation coefficient, * significant at 0.05, ** significant r value at 0.01; 0.2–0.4 is weak, 0.4–0.6 is moderate, 0.6 and above is a strong correlation

Table 5 Regression between compassion scale and psychological resilience scale

Dependent variable	Compassion					
Argument	t	R	r ²	dzltr2	F	p
Psychological Resilience	7,670	,140	0,152	0,135	12,410	0,000*

*significant at the $p < 0.01$ level

private hospitals have high levels of psychological resilience (Cevizci & Muezzin, 2019; Ugan et al., 2018). It is believed that the difference between these findings may be attributed to the working conditions of healthcare professionals and the necessity of making correct and rapid decisions while intervening with individuals in need of healthcare, which may negatively impact their ability to effectively manage their emotions and their psychological resilience.

In our study, a strong correlation was identified between the gender of healthcare professionals and the compassion scale when the impact of descriptive features on the average scores of compassion and psychological resilience of healthcare professionals was analyzed. Accordingly, it was found that women and men differed in their levels of compassion. Our findings are supported by related research in the literature. In their investigations, Gündüzoğlu et al. (2019), Ozan (2019), and Roney and Acri (2018) discovered that women exhibited higher levels of compassion than men. This outcome can be related to women's higher levels of emotional sensitivity and receptivity to events, as well as their integration of these traits into numerous facets of life. Upon evaluating the psychological resilience of healthcare workers, it was ascertained that men exhibited higher levels of psychological resilience compared to women. These findings are corroborated by existing studies in the field (Aslan & Uyar, 2018; Ren et al., 2018). Psychologically demanding conditions are hypothesized to elicit a comparatively lesser emotional impact on men when compared to women.

The marital status of healthcare professionals and the compassion scale did not significantly differ when the impact of descriptive factors on the average scores of compassion and psychological resilience of healthcare professionals was investigated in our study. The investigations by Bülbüloğlu & Çınar (2021) and Doğan Yüksekol et al. (2020), which similarly showed no difference between marital status and levels of compassion, got similar results. According to the study, there was no discernible relationship between healthcare professionals' levels of psychological resilience and their marital status. Similar findings were reported in research by Özdemir and Adıgüzel (2021) and Türkmen & Doğan (2021), which found no connection between psychological resilience and married status. Based on the obtained results, it can be deduced that there is no statistically significant association between marital status and either compassion or psychological resilience.

The study found a significant difference between the professions of healthcare professionals and their levels of compassion. In this regard, it was observed that midwives had the highest levels of compassion, while doctors had the lowest levels. This difference may be attributed to the necessity for doctors to make decisions that are devoid of emotion and sensitivity in order to minimize the risks of making

mistakes while performing their profession (Nugmanovna & Kamariddinovna, 2022). On the other hand, midwives provide care to women during the most intimate moments, such as childbirth (Sökmen & Taşpınar, 2021). It can be said that the indispensable empathic communication in the midwifery profession also encompasses the sense of compassion. Studies on midwives have focused on the concept of compassion fatigue and have indicated that they experience compassion fatigue (Sökmen & Taşpınar, 2021). A comprehensive review of the existing literature unveiled a scarcity of studies with congruent findings to ours.

When faced with challenges, people with high amounts of psychological resilience are said to be able to handle stressful situations and quickly adjust to their surroundings (Bulut, 2016). In a study, a significant difference was found between the professions of healthcare professionals and their levels of psychological resilience, with doctors having the highest level and midwives having the lowest. Similarly, in line with our study, Özdemir and Adıgüzel (2021) found in their research that doctors had the highest scores of psychological resilience compared to other healthcare professional groups. In contrast to our study findings, Türkmen & Doğan (2021) conducted their study on emergency healthcare personnel, and Kuscu Karatepe and Tiryaki Sen (2019) conducted their study on healthcare workers, and they found no significant difference between professions and levels of psychological resilience. Taking into account the working conditions and hours experienced by doctors, it can be postulated that this disparity might augment their capacity to make well-balanced and prompt decisions, as well as strengthen their coping mechanisms when faced with adverse conditions. The number of years of experience of healthcare professionals and their levels of compassion were not significantly different in our study when the impact of descriptive features on the average scores of compassion was analyzed. In order to provide treatment in a hospital setting, healthcare professionals must overcome their obstacles, remain resilient, and gain experience. In our study, a relationship between healthcare workers' degrees of psychological resilience and their years of experience was discovered to exist. The results showed that the highest levels of psychological resilience were seen among healthcare professionals with 21 years or more of experience. Similarly, Öksüz et al. (2019) found in their study that the levels of psychological resilience of healthcare professionals increased as their years of experience in the profession increased. Furthermore, analogous investigations in alignment with our findings can be found in the existing scientific literature (Ang et al., 2018; Gifkins et al., 2017; Zheng et al., 2017).

According to our study's findings, compassion and psychological resilience have a marginally significant negative association. Upon meticulous examination of the study findings, it was ascertained that compassion fatigue constituted

the primary subject of the majority of research endeavors pertaining to healthcare personnel (Sökmen & Taşpınar, 2021; Şeremet & Akıncı, 2021; Şirin & Yurttaş, 2015; Tanrıku & Ceylan, 2021). Furthermore, it was discovered that there is no literature in print that expressly explores the link between compassion and psychological toughness. Conducting comprehensive and varied studies to determine the relationship between compassion and psychological resilience would be a significant contribution to the field.

Hypothesis 1: A statistically significant association between compassion and psychological resilience is anticipated among healthcare practitioners. The study findings demonstrate a paradoxical yet statistically significant relationship between psychological resilience and compassion, providing empirical support to this hypothesis. This discovery serves as a crucial illustration of a noteworthy study outcome.

Hypothesis 2: A statistically significant correlation between compassion and sociodemographic characteristics is expected in healthcare workers. Upon comparing the study results, substantial variations were observed between the compassion scale and sociodemographic traits, specifically gender and occupational categories. These results corroborate hypothesis 2 and constitute a prominent finding of our investigation. However, it was determined that the compassion scale and sociodemographic factors, including age, marital status, and years of experience, did not exhibit statistically significant differences, revealing a limitation in this aspect of our research.

Hypothesis 3: Statistical differences are anticipated in the levels of psychological resilience concerning sociodemographic traits among healthcare practitioners. Upon comparing the psychological resilience scale with sociodemographic factors, such as gender, occupation, and years of experience, significant differences were observed in our study's findings, thereby supporting hypothesis 3 and constituting a key finding of our investigation. Nevertheless, the psychological resilience scale and sociodemographic factors, including age and marital status, were not found to significantly differ from each other, highlighting a limitation in this particular aspect of our research.

Limitations and recommendations for future research

Our study centered on investigating the impact of compassion and psychological resilience among healthcare professionals. However, certain limitations necessitate further deliberation. Firstly, the adoption of an online data collection method, while pragmatic given the circumstances, restricted our sample to individuals with internet access,

possibly introducing selection bias. Secondly, data collection occurred amidst the ongoing COVID-19 pandemic, potentially confounding or influencing the data values. Thirdly, we were unable to explore potential interactions among different demographic variables.

Despite the aforementioned limitations, our study contributes valuable insights into the concepts of compassion and psychological resilience among healthcare professionals. Future research should investigate these notions in combination with other pertinent variables to acquire a thorough knowledge of their interplay. Moreover, while our study focused on medical doctors, nurses, and midwives, it is advisable for future research to encompass a broader range of healthcare professional groups to facilitate a more holistic examination.

Lastly, the findings of our study hold implications for designing targeted interventions aimed at enhancing compassion and psychological resilience in healthcare professionals. Utilizing these insights, future interventions can be devised to promote the well-being and effectiveness of healthcare professionals in challenging work environments.

Result

Healthcare professionals are expected to be both compassionate and emotionally resilient when dealing with various stressors in their work environments and conditions. The findings of our study revealed a slight significant negative relationship between psychological resilience and compassion. In other words, as the levels of compassion among healthcare professionals increase, their levels of psychological resilience decrease. Additionally, the study found that the average scores for both compassion and psychological resilience were at a moderate level. Given the unique working conditions experienced by healthcare professionals, it is advisable to implement tailored training programs aimed at sustaining their levels of compassion and bolstering their psychological resilience during the course of care provision. Ensuring the continuity of these programs is also important.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s12144-023-05169-w>.

Author contributions All authors contributed to the concept and design of the study. Material preparation, data collection and analysis were carried out by [Vesile Adıgüzel], [Kübra Tan] and [Ayşe Okanlı]. The first draft of the article was written by [Vesile Adıgüzel] and all authors have commented on previous versions of the article. All authors have read and approved the last article. Conceptualization: [Vesile Adıgüzel]; Methodology: [Vesile Adıgüzel]; Writing—original drafting: [Vesile Adıgüzel], [Kübra Tan]; Writing, reviewing and editing: [Ayşe Okanlı], [Vesile Adıgüzel]; Sources: [Vesile Adıgüzel], [Kübra Tan]; Audit: [Vesile Adıgüzel], [Kübra Tan], [Ayşe Okanlı].

Declarations

Ethical approval Approval has been obtained from Artvin Çoruh University Ethics Committee. The procedures used in this study,

It was implemented in accordance with the principles of the Helsinki Declaration.

Consent to participate Informed consent was obtained from all participants included in the study.

Conflict of interest As the responsible author on behalf of all authors, I state that there is no conflict of interest with other authors. Our study was carried out by all authors in accordance with ethical standards. No funding has been received for the conduct of this study.

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