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Compassionate love, burnout and professional commitment in nurses

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Abstract

Aims: To determine the effects of compassionate love on burnout and professional commitment in nurses.

Background: Compassionate love as 'other-centred' love is referred to as altruistic love, unconditional love and unreciprocated love. Compassionate love has an important role among nurses in moderating burnout and increasing professional commitment.

Methods: One-hundred ninety-four nurses working at two public hospitals in Turkey completed four self-report instruments: socio-demographics, the Compassionate Love Scale, the Burnout Measure-Short Version and the Nursing Professional Commitment Scale.

Results: A statistically significant inverse relationship was found between Compassionate Love Scale and Burnout Measure-Short Version scores, while Compassionate Love Scale scores were significantly and positively associated with Nursing Professional Commitment Scale scores. Participants with children had higher Compassionate Love Scale scores while those participating in the arts had lower Burnout Measure-Short Version scores. Nurses with intensive care experience had higher Nursing Professional Commitment Scale scores.

Conclusion: There is a positive relationship between compassionate love and professional commitment, a negative relationship between compassionate love and burnout. Further research is needed to test compassionate love interventions.

Implications for Nursing Management: Nurse managers may use the results of this study in encouraging and rewarding acts of compassionate love towards colleagues and patients.

KEYWORDS

burnout, compassionate love, nursing, professional commitment

1 | BACKGROUND

Compassionate love as 'other-centred' love is referred to as altruistic love, unconditional love and unreciprocated love (Sprecher & Fehr, 2005). It is believed to be a longer-lasting, prosocial emotion towards others and has been associated with altruistic behaviours (Sprecher & Fehr, 2005; Underwood, 2009).

In the literature, theorists believed that compassionate love dates back to ancient times, and it is an instinctive behaviour towards survival and protection of animals themselves or their offspring during the

evolutionary developmental process (Hatfield & Rapson, 1994). It is stated that compassionate love is related to parent–child attachment, and the oxytocin hormone and neurobiological mechanisms play a role in this process (Burunat, 2019; Perry, Blair, & Sullivan, 2017). Animal experiments related to mother–infant attachment found that infant mice have neurobiological mechanisms that facilitate attachment and increased norepinephrine secretion, whereas the hypothalamic-pituitary stress axis was inhibited. This way, parent–infant attachment is achieved, and infants can survive and be protected from danger (Csaszar-Nagy & Bokkon, 2018; Perry et al., 2017).

The main purpose of nursing is to offer respect and compassionate care to the individual, accounting for their individual characteristics in protecting and maintaining the life of the individual/patient (Fowler, 2015). Care has components such as being with the individual, being close, being honest, providing confidence and being open (Potter & Perry, 2009). It is seen that these components that make up the concept of care are similar to formation of compassionate love and the development of affection, closeness and sincere ties between individuals and their caregivers (Hatfield & Rapson, 1994). Compassionate love has not yet been defined in the nursing literature, while compassion and being compassionate have been examined (Nijboer & der Cingel Van, 2018; Wentzel & Brysiewicz, 2018).

Nurses are often affected by patients' emotional experiences as they adapt interventions base on their own experiences, knowledge and personality (Louch, O'Hara, Gardner, & O'Connor, 2016). Nursing care is dependent on the relationship between the acts of a nurse and patient outcomes (Richardson, Percy, & Hughes, 2015). Therefore, compassion, compassionate love and empathy in nursing care can affect the outcomes of patient care (Percy & Richardson, 2018). However, nurses' psychological problems such as burnout, fatigue and stress have a negative impact on patient care (Cañadas-De la Fuente et al., 2015; Waddill-Goad, 2019), and studies have shown that burnout in nurses affects the quality of health care quality negatively (Kelly & Adams, 2018; Khamisa, Peltzer, Ilic, & Oldenburg, 2017). Burnout is associated with psychiatric and physical disorders such as anxiety and cardiovascular disease (Fornés-Vives, García-Banda, Frias-Navarro, & Pascual-Soler, 2019). Several studies have demonstrated that as burnout increases, nurses' mental health is adversely affected (Fornés-Vives et al., 2019; Reknes et al., 2014; Rudman & Gustavsom, 2011).

Professional commitment provides a link between individuals and their professions that they choose and believe in, as well as the effort to reach values, their desire to develop themselves and their determination to pursue their membership (Ayaz-Alkaya, Yaman-Sözbir, & Bayrak-Kahraman, 2018; Nesje, 2016). Professional commitment may play an important role for nurses (Chiang, Lee, Chu, Han, & Hsiao, 2016). Gellatly, Cowden, and Cummings (2014) determined that as the professional commitment of nurses increases, they show less frequent intentions of turnover. Teng et al. (2009) found that professional commitment improves patient welfare. Professional commitment is beneficial for the employer and the employee. While professional commitment increases job satisfaction, it decreases work stress and intention to leave (Chang et al., 2019; Khamisa et al., 2017; Lu, Zhao, & While, 2019; Rudman, Gustavsson, & Hultell, 2014).

Compassionate love is associated with helpfulness, caring, attention, empathy and sympathy (Sprecher & Fehr, 2005). It may be more likely to lead to positive attitudes and behaviours. Compassionate love is well-suited for nursing, because helping others consists of compassion and love (Nesje, 2016). Nesje (2016) stated that an ideal nurse is someone who is willing to set aside their own wants and needs if necessary. This stereotypical view on nursing perception still exists, and it highlights the uniqueness of this profession (Nesje, 2016). Nurses support that maturation and independence of the patients by internalizing compassionate love. Moreover, compassionate love may meet the mutual needs related to satisfaction, pleasure and sympathy of nurses and patients, especially in societies where love and compassion are supported by religious beliefs like Turkey (Kara, 2012). As a result, compassionate love may play an important role among nurses in moderating burnout and increasing professional commitment.

2 | AIMS

This study was designed to determine compassionate love levels in nurses, the relationship between these compassionate love levels and parameters of burnout and professional commitment in them. The study also evaluated the relationships between compassionate love, burnout and professional commitment and age, gender, having children, number of children, having pets, participation in arts, educational level, marital status and working time nurses at clinics.

3 | METHODS

3.1 | Setting and participants

This study was conducted at two public hospitals in Turkey between October 2018 and March 2019. 101 nurses from the first hospital and 93 nurses from the second hospital participated in the study. The total number of nurses in the first hospital was 350, and the total number of nurses in the second hospital was 286. By means of power analysis conducted with 95% confidence interval, 5% error, effect size of 0.5 and 80% power 204 individuals were needed. A simple random sampling of the population of nurses at both hospitals was performed to recruit the number of nurses needed to complete the study. The study was conducted by the researchers using face-to-face interviews. However, 10 participants were excluded from the study because they wanted to leave the study.

3.2 | Instruments

3.2.1 | Socio-demographic form

This form gathered the personal information of the nurses.

TABLE 1 Characteristics of nurses

		n	%
Age	≤30	119	61.3
	≥31	75	38.7
Gender	Female	178	91.8
	Male	16	8.2
Education	High School	19	9.3
	Graduate	135	69.6
	Master	35	18
	PhD	6	3.1
Marital status	Married	83	42.8
	Single	105	54.1
	Divorced	6	3.1
Having children	Yes	65	33.5
	No	129	66.5
Having pets	Yes	42	21.6
	No	152	78.4
Participation in arts	Yes	41	21.1
	No	153	78.9

3.2.2 | Compassionate Love Scale

The CLS was developed by Sprecher and Fehr (2005) and tested for validity and reliability in the Turkish language by Akın and Eker (2012). It is a 21-item and 7-point Likert-type scale. High scores show high compassionate love levels. Cronbach's alpha for CLS in this study was 0.93. The minimum and maximum scores are 42 and 147 points, respectively.

3.2.3 | Burnout Measure-Short Version

The BMS was developed by Malach-Pines (2005) and tested for validity and reliability in the Turkish language by Tümkaya, Çam, and Çavuşoğlu (2009). The scale consists of 10 items with response options between 1 and 7. Cronbach's alpha for BMS in this study was 0.92. The minimum and maximum scores are 10 and 70 points, respectively.

3.2.4 | Nursing Professional Commitment Scale

The NPCS (Lu, Chiou, & Chang, 2000) was tested for validity and reliability in the Turkish language by Çetinkaya, Özmen, and Bayık Temel (2015). It is a 26-item, 4-point Likert-type scale with three factors (willingness to show effort, maintaining profession membership, belief in goals and values). The minimum and maximum scores are 26 and 104 points, respectively. The minimum–maximum scores that may be obtained from the sub-dimensions are 13–52 for 'willingness to show effort', 8–32 for 'maintaining profession membership' and 5–20 for 'belief in goals and values'. High scores in the total scale and its sub-dimensions indicate that individuals' commitment to their profession is high. Cronbach's alpha for NPCS in this study was 0.70.

3.3 | Data collection

The study was approved by the Ethics Board, and permission was received from the study hospitals. Study participants completed the survey in 15–20 min.

3.4 | Analysis

SPSS 21.00 was used for data analysis. Frequencies, percentages, mean and standard deviation values were calculated. Mann–Whitney *U* test, Kruskal–Wallis test and Spearman's correlation test were used. Bonferroni's correction test and regression analysis were carried out for further analysis. All tests were conducted with alpha = 0.05. The power of the correlation coefficient is indicated by *r*. The correlation values were evaluated as 0–0.2 = very weak, 0.2–0.4 = weak, 0.4–0.6 = moderate and 0.6–0.8 = strong (Karagöz, 2016).

4 | RESULTS

Participant characteristics are presented in Table 1.

4.1 | The results of the scales

The participants' mean CLS, BMS and NPCS scores were found as 99.41 (*SD* = 20.10), 39.36 (*SD* = 15.46) and 66.28 (*SD* = 8.99), respectively. The mean sub-dimension scores of NPCS for willingness to show effort, maintaining profession membership and belief in goals and values were found as 33.76 (*SD* = 7.73), 17.45 (*SD* = 4.88) and 15.06 (*SD* = 2.97), respectively.

4.2 | Relationship between characteristics of nurses and scales

Table 2 shows the relationships between the characteristics of the participants and their CLS, BMS and NPCS scores. Participants with children had significantly higher CLS scores (95% CI: −12.39, −0.43; $p \leq .05$). Those with children and those participating in arts had lower BMS scores (95% CI: 0.91, 10.08; 95% CI: −3.85, 6.88 $p \leq .05$). There was a statistically significant relationship between the participants' maintaining profession membership sub-dimensions scores in NPCS and their numbers of children (95% CI: −0.76, 2.17; $p \leq .05$). There was a statistically significant relationship between the participants' scores in the belief in goals and values sub-dimension of NPCS and their gender (95% CI: −2.68, 0.36; $p \leq .05$; Table 2). There was also a statistically significant relationship between the participants' scores in the belief in goals and values sub-dimension of NPCS and their education levels (high school, graduate and postgraduate; 95%

TABLE 2 Relationship between characteristics of nurses and scales

		Compassionate Love Scale		Burnout Measure-Short Version		Nursing Professional Commitment Scale		Willingness to show effort		Maintaining profession membership		Belief in goals and values	
		$\bar{X} \pm (SD)$	Z_{MWU}[a] p*	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p
Age	≤30	98.45 ± 20.77	−0.67 .49	40.87 ± 14.46	−1.49 .13	66.38 ± 9.26	−1.16 .24	33.57 ± 7.16	−0.03 .97	17.78 ± 4.78	−1.12 .26	15.03 ± 2.95	−0.156 .87
	≥31	100.93 ± 19.02		36.97 ± 16.75		66.12 ± 8.62		34.08 ± 8.59		16.93 ± 5.01		15.10 ± 3.02	
Gender	Female	99.67 ± 20.00	−0.507 .61	38.83 ± 15.70	−1.667 .09	66.39 ± 9.22	−0.977 .32	33.88 ± 7.95	−0.977 .32	17.35 ± 4.99	−1.186 .23	**15.15 ± 3.03**	−1.916 **.05**
	Male	96.43 ± 21.56		45.25 ± 11.27		65.00 ± 6.04		32.43 ± 4.44		18.56 ± 3.32		**14.00 ± 1.86**	
Having Children	Yes	**103.67 ± 18.88**	−2.232 **.02**	**35.70 ± 16.02**	−2.203 **.02**	66.75 ± 7.88	−0.311 .75	34.50 ± 7.61	−0.833 .40	16.98 ± 4.96	−1.055 .29	15.26 ± 2.60	−0.593 .55
	No	**97.26 ± 20.42**		**41.20 ± 14.89**		66.04 ± 7.53		33.39 ± 7.79		17.68 ± 4.84		14.96 ± 3.14	
Number of Children	One	98.86 ± 20.42	−0.628 .53	40.00 ± 15.17	−1.358 .17	66.48 ± 9.07	−1.084 .27	33.65 ± 7.62	−0.257 .79	**17.78 ± 4.80**	−2.151 **.03**	15.04 ± 2.95	−0.196 .84
	Two and high	102.06 ± 18.48		36.27 ± 16.71		65.30 ± 8.70		34.33 ± 8.20		**15.81 ± 5.00**		15.15 ± 3.12	
Having Pets	Yes	98.95 ± 21.36	−0.025 .98	42.40 ± 17.11	−0.373 .70	67.16 ± 8.13	−1.661 .09	33.80 ± 8.17	−0.031 .97	18.07 ± 4.57	−0.532 .59	15.28 ± 2.70	−0.595 .55
	No	99.53 ± 19.80		38.52 ± 14.92		66.03 ± 9.23		33.75 ± 7.63		17.28 ± 4.96		15.00 ± 3.04	
Participation in Arts	Yes	98.48 ± 21.06	−0.555 .57	**38.17 ± 15.27**	−0.674 **.05**	65.82 ± 7.32	−0.525 .60	32.78 ± 6.80	0.985 .32	18.29 ± 4.15	−1.187 .23	14.75 ± 2.98	−0.781 .43
	No	99.66 ± 19.89		**39.68 ± 15.54**		66.40 ± 9.41		34.03 ± 7.96		17.22 ± 5.04		15.14 ± 2.94	
Education	High School	100.61 ± 19.16	0.017[b] .99	43.27 ± 14.76	3.992[b] .13	62.83 ± 13.19	3.585[b] .16	32.33 ± 8.22	1.713[b] .42	16.66 ± 4.87	0.477[b] .78	**13.83 ± 3.82**	6.806[b] **.03**
	Graduate	99.02 ± 19.16		40.25 ± 15.35		65.71 ± 8.09		33.10 ± 7.26		17.70 ± 5.00		**14.90 ± 2.82**	
	P.graduate	97.82 ± 21.92		35.31 ± 15.61		68.88 ± 8.90		35.40 ± 8.23		17.48 ± 4.44		**16.00 ± 2.90**	
Marital Status	Married	102.13 ± 20.74	4.91[b] .08	36.80 ± 16.50	4.693[b] .09	66.90 ± 9.48	0.942[b] .62	34.80 ± 8.48	4.466[b] .10	16.97 ± 5.39	3.773[b] .15	15.12 ± 2.92	0.942[b] .62
	Single	96.94 ± 19.74		41.64 ± 14.06		65.65 ± 8.80		32.76 ± 7.08		17.92 ± 4.48		14.97 ± 3.09	
	Divorced	105.00 ± 12.04		34.83 ± 20.07		68.66 ± 3.80		37.00 ± 5.44		15.83 ± 3.71		15.83 ± 0.98	
Work Duration in Clinics	<5 years	98.55 ± 20.75	1.123[b] .57	41.77 ± 14.54	4.892[b] .08	66.31 ± 9.39	3.529[b] .17	33.73 ± 7.22	1.537[b] .46	17.66 ± 4.83	0.932[b] .62	14.92 ± 2.95	3.537[b] .17
	5–10 years	97.53 ± 19.07		34.42 ± 14.02		68.03 ± 8.79		35.46 ± 8.29		16.53 ± 4.34		16.03 ± 2.70	
	>11 years	101.43 ± 19.62		37.65 ± 16.80		65.55 ± 8.48		33.16 ± 8.26		17.49 ± 5.16		14.89 ± 3.06	

Bold values are statistically significiant.

[a]Z_{MWU}: Mann–Whitney *U*.

[b]χ^2: Kruskal–Wallis.

*$p \leq .05$.

TABLE 3 Relationship between clinics and scales

		Compassionate Love Scale		Burnout Measure-Short Version		Nursing Professional Commitment Scale		*Willingness to show effort*		*Maintaining profession membership*		*Belief in goals and values*	
		$\bar{X} \pm (SD)$	Z_{MWU}[a] *p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p	$\bar{X} \pm (SD)$	Z_{MWU} p
Intensive Care Units	Yes	96.35 ± 19.13	−1.39 .16	34.44 ± 15.63	−0.58 .55	**68.03 ± 9.28**	−2.08 **.03**	**35.16 ± 7.97**	−2.11 **.03**	17.74 ± 5.30	−0.72 .46	15.11 ± 2.98	−0.15 .87
	No	100.74 ± 20.43		39.77 ± 15.42		**65.51 ± 8.79**		**33.15 ± 7.56**		17.32 ± 4.70		15.03 ± 2.98	
Surgical Clinics	Yes	96.15 ± 21.91	−1.44 .14	38.84 ± 16.43	−0.44 .65	66.19 ± 8.32	−0.39 .69	33.32 ± 8.14	−0.74 .45	17.64 ± 4.86	−0.28 .77	15.22 ± 3.02	−0.73 .46
	No	101.29 ± 18.81		39.66 ± 14.93		66.33 ± 9.39		34.02 ± 7.50		17.34 ± 4.91		14.96 ± 2.95	
Medical Clinics	Yes	97.98 ± 20.69	−0.76 .44	39.46 ± 16.43	−0.19 .84	65.52 ± 9.40	−1.27 .20	**32.86 ± 2.68**	−1.90 **.05**	17.58 ± 5.00	−0.27 .78	15.07 ± 3.18	−0.32 .74
	No	100.66 ± 19.57		39.28 ± 14.63		66.95 ± 8.61		**34.56 ± 4.62**		17.33 ± 4.79		15.04 ± 2.79	
Psychiatric Clinics	Yes	107.40 ± 15.58	−1.05 .29	30.90 ± 15.31	−1.77 .07	70.50 ± 5.64	−1.52 .12	37.50 ± 5.10	−1.76 .07	17.00 ± 4.80	−0.17 .86	16.00 ± 2.16	−0.85 .39
	No	98.97 ± 20.26		39.82 ± 15.37		66.05 ± 9.10		33.56 ± 7.80		17.47 ± 4.89		15.01 ± 3.00	
Paediatrics Clinics	Yes	96.60 ± 20.26	−1.06 .28	39.09 ± 15.02	−0.14 .88	67.18 ± 8.11	−0.44 .65	**33.45 ± 7.42**	−0.81 **.04**	18.18 ± 3.90	−1.03 .30	15.54 ± 2.84	−1.07 .28
	No	99.98 ± 20.08		39.42 ± 15.59		66.09 ± 9.18		**33.83 ± 7.81**		17.30 ± 5.05		14.96 ± 2.99	
Emergency Clinics	Yes	97.60 ± 20.71	−0.45 .64	40.82 ± 15.67	−0.57 .56	65.67 ± 9.12	−1.06 .28	33.25 ± 8.33	−0.61 .53	17.64 ± 4.91	−0.17 .86	14.78 ± 3.10	−0.32 .74
	No	99.71 ± 20.04		39.12 ± 15.46		66.38 ± 9.00		33.85 ± 7.64		17.42 ± 4.89		15.10 ± 2.95	
Operating Rooms	Yes	104.65 ± 19.99	−1.54 .12	34.62 ± 14.70	−1.72 .08	65.89 ± 9.32	−0.37 .70	33.82 ± 7.22	−0.31 .75	17.20 ± 5.08	−0.24 .81	14.86 ± 3.07	−0.42 .66
	No	98.49 ± 20.04		40.20 ± 15.48		66.35 ± 8.96		33.75 ± 7.83		17.49 ± 4.86		15.09 ± 2.86	
Gynaecology and Obstetrics Clinics	Yes	101.52 ± 20.84	−1.11 .26	39.45 ± 14.29	−0.10 .91	66.32 ± 10.02	−0.23 .81	34.42 ± 8.50	−0.49 .61	17.05 ± 5.10	−0.56 .57	14.85 ± 3.22	−0.30 .75
	No	98.86 ± 19.93		39.34 ± 15.79		66.27 ± 8.74		33.59 ± 7.53		17.55 ± 4.83		15.11 ± 2.91	

Bold values are statistically significiant.

[a]Z_{MWU}: Mann–Whitney *U*.

*$p \leq .05$.

CI: 0.37, 1.72; $p \leq .05$; Table 2). The Bonferroni correction was performed to reveal the source of the difference between the groups. Since the number of the variables was 3, the Bonferroni correction was found to be 0.05/3 = 0.0166. Mann–Whitney *U* test was used to find the source of the difference. No significant difference was found between high school graduates and university graduates ($Z = -1.17$, $p = .24$), between high school graduates and those with postgraduate degrees ($Z = -2.08$, $p = .03$) or between undergraduate and postgraduate degree holders ($Z = -2.23$, $p = .02$).

4.3 | Relationship between clinics and scales

Table 3 shows the relationships between clinical site and CLS, BMS and NPCS scores. While the participants who had intensive care experience had significantly higher NPCS scores and scores the willingness to show effort sub-dimension of NPCS ($p \leq .05$), there were positive and moderately significant relationships between work duration in operating rooms and scores in the willingness to show effort sub-dimension ($r = .41$; $p \leq .05$), positive and weak significant relationships between work duration in operating rooms and scores in the maintaining profession membership sub-dimension ($r = .38$; $p \leq .05$) and a significant and weak negative relationship between work duration in operating rooms and the belief in goals and values sub-dimension ($r = -.29$; $p \leq .05$; Table 3). Moreover, the scores of the participants who had experience of medical clinics and paediatrics clinics in the willingness to show effort sub-dimension of NPCS were found to be low (Table 3). There was a significant, weak and negative relationship between work duration in medical clinics and BMS scores ($r = -.23$; $p \leq .05$).

4.4 | Correlations and regression among scales

The correlations among the mean total scores of CLS, BMS and NPCS are shown in Table 4. There was a negative, very weak and significant relationship between the mean CLS and BMS scores ($r = -.19$; $p \leq .05$), while there was a positive, weak and significant relationship between the mean CLS and NPCS scores ($r = .36$; $p \leq .05$). CLS had a positive weak significant relationship with the willingness to show effort and belief in goals and values sub-dimensions of NPCS ($r = .39$; $r = .33$; $p \leq .05$), and CLS had a negative very weak significant relationship with the maintenance of profession membership sub-dimension ($r = -.20$; $p \leq .05$) (Table 4). In this study, negative and significant relationships were found between the BMS scores and the total NPCS ($r = -.30$; $p \leq .05$), willingness to show effort ($r = -.40$; $p \leq .05$) and belief in goals and values scores ($r = -.34$; $p \leq .05$), while there was a positive and significant relationship between the maintenance of profession membership sub-dimension of NPCS and BMS ($r = .24$; $p \leq .05$) (Table 4).

The interaction effects between CLS and BMS ($R^2 = .044$; $p = .003$), between CLS and NPCS ($R^2 = .10$; $p = .000$) and BMS and NPCS ($R^2 = .14$; $p = .000$) were statistically significant (Table 5). The opposite effects between CLS and BMS, between CLS and NPCS and between BMS and NPCS were determined.

5 | DISCUSSION

Compassionate love was developed an important factor that increases the intrinsic motivation of individuals (Sprecher & Fehr, 2005). Beyond the past and present behaviours of individuals, their

TABLE 4 Correlations among scales

	Compassionate Love Scale	Burnout Measure-Short Version	Nursing Professional Commitment Scale	Willingness to show effort	Maintaining profession membership	Belief in goals and values
Compassionate Love Scale	1.00					
Burnout Measure-Short Version	**−0.19***	1.00				
Nursing Professional Commitment Scale	**0.36***	**−0.30***	1.00			
Willingness to show effort	**0.39***	**−0.40***	**0.81***	1.00		
Maintaining profession membership	**−0.20***	**0.24***	0.08	**−0.45***	1.00	
Belief in goals and values	**0.33***	**−0.34***	**0.76***	**0.63***	**−0.20***	1.00

Bold values are statistically significiant.

*$p \leq .05$ Spearman's correlation.

TABLE 5 Regression among scales

Dependent Variable	Independent variable	R^2	*F*	*B*	*t*	*p*
Compassionate Love Scale	Burnout Measure-Short Version	.044	8.848	−0.273	−2.975	.003
Nursing Professional Commitment Scale	Compassionate Love Scale	.10	21.252	0.705	4.610	.000
Burnout Measure-Short Version	Nursing Professional Commitment Scale	.14	31.345	−0.644	−5.599	.000

biological and personality traits, thoughts, spiritual and religious experiences are effective, and intrinsic and extrinsic factors that affect the individuals. These traits and experiences, therefore, precondition individuals' feelings of love, compassion and empathy (Kanter, Holman, & Wilson, 2014). In brief, behaviour emerges as a result of the interaction among and between neural and biological mechanisms, interpersonal relationships and experiences (Lamm, Rütgen, & Wagner, 2017). Compassionate love is developed in the evolutionary process, and it has been genetically transmitted to individuals and survived to the present day (Hatfield & Rapson, 1994). Likewise, love, volunteerism, devotion, helping others, donating and altruism are sociologically and culturally learned as behaviours accepted by individuals and communities (Post, 2005). Historically, nursing has been a profession of care provided voluntarily by women for those who need assistance. Florence Nightingale, founder of modern nursing, helped the soldiers who were injured in World War I voluntarily. In the practices she carried out voluntarily (Wolstenholme, 1970), she also set the foundations of today's nursing profession by using scientific information. Nursing is now a health care profession where financial gains can be obtained. Yet, just as organisms transfer their genetic heritage to new individuals, the compassionate love of Florence Nightingale is transferred to all nurses worldwide as a heritage of educational and clinical processes.

Considering the relationship among compassionate love, professional commitment and burnout and the characteristics of the participants, nurses with children were significantly higher in compassionate love than those who did not have children ($p \leq .05$; Table 2). Underwood (2009) emphasized the importance of interpersonal relationships in the emergence of compassionate love. They reported that levels of compassionate love are high especially in the process of communication with family members, individuals with whom close relationships are established and in groups with the same objective. Nitschke et al. (2004) determined that mothers gave different neurological reactions when they saw the photographs of their own children and someone else's children. They experienced positive feelings about their children's photographs. The high levels of compassionate love among the participants who had children may be explained by their experience of love in their daily lives.

Conversely, participants who did not have children had higher burnout levels ($p \leq .05$; Table 2). Not having children can affect mental health negatively, reducing life satisfaction, marriage quality and interpersonal relationships in general (Maroufizadeh et al., 2018). Suarez, Asenjo, and Sanchez (2017) found that having children affected health care professionals' job satisfaction positively. Yet, in their study with transplant nurses, Yang et al. (2018) determined that having children increased burnout. Additionally, the participants who had one child wanted to stay as members of their professions more than those that had two or more children. These different results may be due to cultural or geographical differences. Therefore, more research in this area is needed.

This study found that the participants who participated in arts experienced less burnout than those who did not (Table 2). For coping with stress and preventing burnout, it is recommended to reveal individuals' skills and increase their resilience (Arrogante & Aparicio-Zaldivar, 2017; Yu, Raphael, Mackay, Smith, & King, 2019). Participation in arts deepen one's appreciation of life. Art utilizes symbols to transfer emotions, ideas and expectations that may lead to feelings of emotional recovery, conflict resolution and comfort (Mosek & Gilboa, 2016). Since resilience and creativity increase problem-solving capacity, participating in arts can free creativity and spontaneity, and thus increase the resilience of individuals (Hass-Cohen, Bokoch, Findlay, & Witting, 2018). Studies have revealed that individuals who participate in arts can cope with stress more easily and experience less burnout (Gam, Kim, & Jeon, 2016; Salzano, Lindemann, & Tronsky, 2013).

In this study, female participants set more goals in their profession and had higher levels of belief in goals and values sub-dimension in comparison to the male participants (Table 2). In Turkey, one in every 3 women over the age of 15 has the opportunity to work (Turkish Statistical Institute, 2017). The vast majority of nurses are women. The fact that female participants set goals in their profession may be explained by their desire to increase their positive status and financial benefit by having a professional life. It was also found in this study that, as the educational levels increased, participants' scores on their beliefs in goals and values also increased ($p \leq .05$; Table 2). Similarly, Rahman, Jarar, and Sobri Don (2015) previously reported that, as the educational levels of nurses progressed, their awareness, self-esteem, analytical thinking skills and communication skills related to their professions improved, and this had positive effects on care outputs.

With respect to work location, participants who had experience in working at intensive care clinics had higher scores on professional commitment and willingness to show effort. The willingness to show effort scores were lower among those who had clinical experience in paediatrics (Table 3). Moreover, as the work duration in medical clinics increased, the levels of burnout decreased. Meanwhile, as the work duration in operating rooms increased, willingness to show effort, maintaining profession membership and belief in goals and values increased. It may be as though there is a trade-off between joy/love/compassion and professionalism/effort/goals-orientation. Berger, Polivka, Smoot, and Owens (2015) reported that nurses in medical/surgical and psychiatry units had low satisfaction and high burnout. Meanwhile, those working in mother/baby/nursey clinics had higher satisfaction.

In this study, as compassionate love levels increased, participants' burnout levels decreased, and their professional commitment, willingness to show effort and belief in goals and values sub-dimensions of professional commitment increased (Table 4). Compassionate love involves motivating oneself, helping others and giving without expecting (Omoto, Malsch, & Barraza, 2009; Sprecher & Fehr, 2005). A nurse witnesses the most private and personal moments during which patients rethink their whole life and reconceive their remaining life. This process affects nurses' life satisfaction whereby the nurse strengthens existential values they have developed often based on by religious teachings and spiritual beliefs. There is a relationship among religion, spirituality and positive emotions (Vaillant,

2013), especially in traditional societies with a strong affinity for religion, by which compassionate love may be religiously and culturally support. The belief that everything that is done for humanity will reach God, and its effects will be positive, is widespread. This concept is supported by a proverb in Turkish which may be translated as 'do a good deed and throw it into the sea. If the fish do not know, the Creator knows' (Bulut, 2016). The professional difficulties of nurses, factors such as long working hours, insufficient salaries, lack of personnel and the negative social status of the profession can lead to physical and psychological problems among nurses and increase their levels of burnout (Dall'Ora, Griffiths, Ball, Simon, & Aiken, 2015; Khosrojerdi, Tagharrobi, Sooki, & Sharifi, 2018). This study found that the burnout levels of the nurses decreased as their levels of compassionate love increased. This suggests the significance of intrinsic motivation in reducing the burnout levels of nurses. Furthermore, in our study, as compassionate love increased, professional commitment also increased. This result may be interpreted as an effect of compassionate love which is related to feelings of satisfaction, gladness and usefulness while serving to alleviate the pain of the patient and sustaining their maximum state of wellness. Additionally, as a result of increased compassionate love levels, reduction of maintaining profession membership sub-dimension despite the increased willingness to show effort and belief in goals and values sub-dimensions of professional commitment may be explained by compassion fatigue (Table 4). As the level of burnout increased in this study, it was found that the scores of maintaining profession membership sub-dimension of professional commitment also increased (Table 4). It may be possible that individual factors were effective in maintaining the membership of the profession.

5.1 | Limitations

As this study was conducted at two hospitals in Turkey, the results cannot be generalized to all nurses; these results are valid for the sample. A limitation was that our sample consisted only of volunteer participants, and the data collection process was based on self-reporting. Another limitation was that the hospitals where the study was conducted are Turkey's research and training hospitals with intensive patient populations. Nurse workload is high thereby limiting response rate. This situation prevented us from reaching the entire population in our study. In addition, results may be mediated by the religious context of this society.

6 | CONCLUSION

This study investigated the compassionate love, burnout and professional commitment levels of nurses. Accordingly, there is a positive relationship between compassionate love and profession commitment, a negative relationship between compassionate love and burnout. Further research is needed to test compassionate love interventions. Thus, this study may provide inspiration for other studies that will be carried out with nurses in the future.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

This study shows it may be important for managers to recognize a relationship between compassionate love and burnout, as well as professional commitment. Increases in burnout rates among nurses are associated with reduced professional commitment. Even when managers perform multiple physical and psychosocial interventions with the aim of preventing burnout among nurses and increasing their professional commitment, eliminating burnout remains far out of reach. As a result, nurse burnout continues to drive increased exit from the nursing profession. Nurse managers may, nonetheless, use this study's results to identify and implement initiatives to increase their nurses' level of compassionate love and, perhaps, better avert burnout. For this, nurse managers should encourage participation in arts, reward selfless acts towards others to encourage these behaviours and recognize the intrinsic characteristics of nurses. Furthermore, studies are needed to develop and test screening tools to use towards hiring those with higher intrinsic characteristics of compassionate love.

ETHICAL APPROVAL

Zeynep Kamil Women's and Children's Health Research and Training Hospital Ethics Board/136.

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