

Original Article

The Psychometric Evaluation of the Turkish Version of the Compassion of Others' Lives Scale (The COOL)

Halise Coskun, RN, PhD

Assistant Professor, Girne American University, School of Nursing, Kyrenia, Cyprus

Oznur Kavakli, RN, PhD

University of Health Sciences, School of Nursing, Ankara, Turkey

Mustafa Babayigit, MD

University of Health Sciences, School of Nursing, Ankara, Turkey

Jyh-Hann Chang, Psych. PhD

East Stroudsburg University, East Stroudsburg, Pennsylvania, USA

Correspondence: Halise Coskun, Girne American University, School of Nursing, Girne, North Cyprus Via Mersin 10-Turkey E-mail: halisecoskun@gau.edu.tr

Abstract

Background: Compassion has been an attractive subject for the public and the health service sector in the last decade. Nursing service without compassion leads to the patients' dissatisfaction therefore compassion is required for health service practices as a guiding principle.

Aim: This is a methodological study and aims to test the reliability and validity of the Turkish version of the Compassion of Others' Lives Scale (The COOL).

Methods: 349 nursing students took part in the survey research between January and February 2015 and 100 students were retested. Cronbach's alpha coefficient has been used for the questionnaire's reliability analysis.

Results: The analysis reveals that scale items were concentrated on two factors as it was in the original scale. The factor analysis found that the two factors explained 44.10% of the total variance. Factor 1, alleviate suffering subscale had the most explanatory power with a total variance of 34.70%. Demographic characteristics should be taken into account while dealing with compassion.

Conclusion: Turkish version of the Compassion of Others' Lives Scale is found as a reliable and valid scale. The Compassion of Others' Lives Scale might be helpful for measuring compassion level in health professionals.

Keywords: compassion, empathy, nursing, reproducibility of results, Turkish

Introduction

Compassion has been an attractive subject for the public and the health service sector in the last decade (Van der Cingel, 2014). Compassion is not a new subject for the theory or the practice of nursing. Starting with Nightingale, various modern theorists have dealt with dimensions of compassion (Van der Cingel, 2014) and have theorized the subject (Georges, 2013). There is a debate among the scholars about whether compassion can be measured and taught or not (Adamson & Dewar, 2011).

Compassion is one of the components of the nursing values, known as the 6Cs (The values are care, compassion, competence, communication,

courage and commitment)(Wood, 2014). Defined as the ability to feel the suffering of another and the desire to act in a way so that suffering can be reduced (Wiklund & Wagner, 2013), compassion is related with but different than concepts such as empathy, caring and sympathy (Gelhaus, 2012).

Various theorists consider empathy a prerequisite for compassion. In order to use empathic ability, a person should understand how another person feels by using his/her imagination (Van der Cingel, 2011). While empathy refers to understanding the others' feeling, ideas and emotions, caring is defined as the psychological situation of a person in the presence of another's anxiety, distress and concern (Schantz,

2007). Caring is one of the essentials for nursing (Wood, 2014). Although the patients respect the nurses due to this characteristic, it is not an easy task to construct a definition of caring that is scholarly accepted and scientifically measurable (Richardson, Percy & Hughes, 2015).

On the other hand, sympathy is defined as a general affinity with a person's emotions, whatever they involve. Most people define compassion as a deep sympathy for a close friend's sorrow or difficulties. What differs compassion from these related concepts is that compassion leads to action internally. That is, compassion does not only involve the knowledge that someone is suffering; it is also accompanied by a strong desire to alleviate or end the suffering (Schantz, 2007).

Since the concepts listed above are interrelated and since they have similar definitions, it is not easy to assess whether everyone is speaking on the same thing. Despite the definitional similarities between caring, compassion and empathy, the patients that receive medical help may assess the extent to which nurses reflect these traits or not in their behaviors and attitudes (Richardson, Percy & Hughes, 2015). Nursing service without compassion leads to the patients' dissatisfaction (Straughair, 2012). Hence, compassion is required for health service practices as a guiding principle (Van der Cingel, 2014).

In addition to these, compassion is a part of being a human. A person, who is accused for lack of compassion may feel humiliated. Religions consider compassion as a virtue to be appreciated. Additionally, compassion is contagious like apathy and indifference (Schantz, 2007). Being compassionate, sensitive and respectful to himself/herself will contribute to the person to develop compassionate attitudes towards other people (Wiklund & Wagner, 2013).

The desire to help the people that are in need of help is considered to be the prime motivation factor in nursing profession (Carter, 2014). It is found that altruism, or caring about others, decreases over time and it is believed that this decrease will have a negative impact over compassionate behaviors. This decrease in altruism may be related to factors such as changing roles of nurses, high levels of stress and the feeling of exhaustion, organizational problems created by the modern healthcare

services, and the education on nursing (Straughair, 2012).

Although compassion has been an essential part of the nursing profession since the beginning, it was in 1992 that Joinson used the term 'compassion fatigue' for the first time (Lee, Veach, MacFarlane & LeRoy, 2015).

This was followed by studies related to compassion fatigue on nurses working in different departments (Aycok & Boyle, 2009; Hunsaker, Chen, Maughan, & Heaston, 2015). & These works used the Professional Quality of Life Scale (ProQOL) that was first constructed by Stamm and Figley (2009) in their study on compassion satisfaction and compassion fatigue risk, and that was later modified by Stamm in 2010 (Sheppard, 2015).

The reliability and validity of the Turkish translation of this scale has been conducted by Yesil et al. in 2010 (Yesil, Ergun, Amasyali, Er, Olgun & Aker, 2010). There is no other scale in Turkish that has been constructed to determine the compassion levels towards other people. Paying attention to compassion level, while dealing with compassion satisfaction and compassion fatigue, may contribute to the evaluation of scientific data and discovery of new proofs.

Due to this, we believe that by using this scale, we may scientifically evaluate the compassion, which is a requisite for not only the nurses but also for other people working in health sector. This study aims to test the reliability and validity of the Turkish version of the Compassion of Others' Lives Scale (The COOL).

Methods

Design and setting

This methodological study was conducted between the 15th of January and the 15th of February 2015 in a nursing vocational high school in order to test the reliability and validity of the Turkish version of the Compassion of Others' Lives Scale.

Sample

Given that the scale consisted of 26 items, we aimed to test the scale over at least 260 students and reached 349 nursing students, who agreed to take part in this study. The recommended criterion is at least 5-10 participants per item of an instrument for determining the factor structure (Tinsley & Tinsley, 1987).

Data Collection Methods

Data Collection Form

Data collection form consisted of questions about demographic characteristics of the participants, including their age, number of sisters/brothers, history of chronic illness, family members with disabilities, living together with the family, the existence of any mortality in the family and the parents' marital status, profession, education and income level.

The Compassion of Others' Lives Scale (The COOL)

We contacted Dr.Chang via e-mail and received required permission for adaptation of the scale into Turkish. The COOL scale developed by Chang et al. in 2014 consisted of 26 items and two subscales, namely empathy (1-13 items) and alleviate suffering (14-26 items) subscales. The response format was in the form of 7-point Likert scale (1 for strongly disagree, and 7 for strongly agree). In their study over two samples, Chang et al. found Cronbach's alpha score of 0.872 and 0.894 (Chang, Fresco & Green, 2014).

Scoring

The points obtained from each subscales showed the respondent's characteristics that the subscale evaluated. While calculating the score, the total point obtained from a particular subscale was divided to the total number of items that the subscale consisted of. These average scores from each subscales were added in order to find the total COOL score.

Self-Compassion Scale

Reliability and validity of the Turkish version of the Self-Compassion Scale constructed by Neff (2003) was tested by Akin et al. in 2007. Confirmatory factor analysis showed that the Turkish version of the scale was compatible with the original scale. Internal consistency coefficients of the scale varied between .72 and .80, whereas test-retest reliability coefficient varied between 0.56 and 0.69. Turkish version of the scale consisted of 27 items and 6 subscales as the original scale. Higher scores for each subscales indicated that the respondent held the characteristics that the subscale measured. The scale measured a single self-compassion score (Akin, Akin & Abacı, 2007).

Emphatic Tendency Scale

Emphatic Tendency Scale developed by Dökmen (1988) aims to evaluate the emotional components of empathy and to measure people's potential to develop empathy in their daily lives.

The scale consisted of 20 items and the Cronbach's Alpha was found to be 0.72. The scores obtained from the scale indicate the participants' level regarding the level that the scale aimed to measure. Higher score indicated that the participant had a higher tendency to develop empathy whereas lower scores indicated the opposite (Dökmen, 1988).

Implementation

Translation procedure

In order to maintain translational validity, the scale was translated by two scholars of nursing with good knowledge of English and a teacher of English independent of each other. The translated scales were re-translated into English by three people with perfect knowledge of English independent of each other.

These re-translated scales were compared with the original scale for their translational validity and it was found that the re-translated scales were consistent with the original scale (Gjersing, Caplehorn & Clausen, 2010).

Next, in order to evaluate the extent to which the Turkish translation of the scale was understandable, a pre-survey was conducted over 10 students of nursing. The pre-survey findings revealed that the items were understandable. These ten students were not included in the sample of the study.

Survey Study

The participants were informed about the aim of the study and were asked to complete the COOL, Self-Compassion and the Emphatic Tendency Scales. It took between 12 and 15 minutes for the students to complete the survey instruments. The COOL scale was administered to 100 students three weeks later.

Ethical Consideration

The study was approved by the Ethical Committee of Academy (50687469-1491-135-15/1648.4-260). Informed consent was obtained from the participants.

Data Analysis

SPSS version 15.0 (Chicago, IL, USA) was used for analyzing the data obtained. While evaluating the socio-demographic data, descriptive statistics, including number, percentage mean and standard deviation were used. Kolmogorov Smirnov Goodness of Fit test was used to compare the scale scores with their identifiers. We used T-Test for two-paired groups and One Way ANOVA for groups more than two. In order to evaluate the sampling adequacy, we used Kaiser-Meyer-Olkin (KMO) test. The correlation between the items in the scale was analyzed by using Pearson correlation coefficient and the reliability of the scale was analyzed by using Cronbach's Alpha coefficient, as an indicator of internal consistency. Subscale scores in test-retest analysis were compared by paired-sample T-test. Besides, the correlation between the mean scores of subscales was calculated by using intra-class correlation coefficient test.

While evaluating the construct validity, factorial structure of the scale was analyzed by using exploratory factor analysis and varimax rotation. The correlation between the mean scores for the COOL, Self-Compassion and the Emphatic Tendency Scales were analyzed by using the Pearson correlation coefficient for criterion validity. $p < 0.05$ value was taken to indicate statistical significance.

Results

Demographic data and participants' characteristics

349 participants studying at a nursing vocational high school in Turkey took part in this study. The mean age of the students was 19.6 ± 1.39 . First-year students received higher scores for the COOL scale and alleviate suffering subscale compared to the other students. The study found a statistically meaningful difference between the average scores obtained by different classes from alleviate suffering subscale. The average score for this subscale was the highest for the first-year students and the lowest for the fourth-year students. Besides, the difference between the average scores obtained from the COOL scale by the first, the third and the fourth-year students was statistically significant ($p < 0.05$). Regarding the relationship between the educational status of the participants' mothers and the mean scores for the COOL scale, the study found statistically significant difference between average scores for

the empathy and alleviate suffering subscales the average COOL scale for the category of primary and secondary school graduates and that of university graduates and above ($p < 0.05$). Regarding the relationship between family income levels and the average COOL scale scores, we found that those with an income that is higher than their expenditures had higher average scores for the empathy and alleviate suffering subscales and the average COOL scale ($-p < 0.05$). Regarding the relationship between the existence of family members with disabilities and the average COOL scale scores, this study found that the participants who have one or more family members with disability had higher average scores for the empathy subscale compared to the other participants ($p < 0.05$). (Table-1). The percentage of missing items was 0.39%.

Reliability

Table 2 demonstrates the corrected-item total correlation coefficients of the COOL scale, Cronbach's alpha if item is deleted and Cronbach's alpha values for the subscales. The analysis of the corrected item-total correlation reveals that the correlation coefficients varied between 0.325 and 0.724. Cronbach's alpha coefficients for empathy and alleviate suffering subscales and the total score of Turkish COOL scale were 0.878, 0.880, and 0.919, respectively (Table 2). The correlation analysis conducted for the reliability of the test-retest found positive and statistically significant correlation between the total scores obtained from the test and the re-test ($p < .001$). (Table 3).

Factor Analysis

Factor analysis results obtained by exploratory factor analysis are shown in Table-4. The analysis reveals that scale items were concentrated on two factors as it was in the original scale. When the factorial structure of the scale was evaluated, special attention was paid if items in each factor group were loaded with a factor of at least 0.30. We found that the factor loads of items ranged between 0.31 and 0.77. The 13th item, which was placed under the empathy subscale in the original scale was placed under alleviate suffering subscale in this study. The factor analysis found that the two factors explained 44.10% of the total variance. Factor 1, alleviate suffering subscale had the most explanatory power with a total variance of 34.70%.

Table 1. Comparison of the Students' Demographic Characteristics and the Scores for the COOL Scale

				The Compassion Of Others' Lives (COOL) Scale			p
		n	(%)	Empathy subscale	Alleviate suffering subscale	Total	
				Mean±SD	Mean±SD	Mean±SD	
Grade**	1	120	34	5.37 ± 0.79	6.22 ± 0.60^b	11.60±1.25^b	0.018^a <0.001^b
	2	74	21	5.26±0.77	6.00±0.68	11.27±1.34	
	3	81	24	5.23±0.74	5.92±0.66^a	11.16±1.23^a	
	4	74	21	5.16±0.73	5.82±0.66^b	10.99±1.24^a	
Number of Sister/Brother*	0-2	278	80	5.29±0.75	6.03±0.66	11.32±1.26	0.448
	3 and over	71	20	5.21±0.82	5.98±0.67	11.19±1.34	
Marital status of the parents *	Married	329	94	5.28±0.76	6.02±0.67	11.30±1.28	0.866
	Single	20	6	5.21±0.81	6.03±0.57	11.25±1.28	
Professional Status of the Mother *	Yes	70	20	5.38±0.81	6.08±0.67	11.46±1.32	0.175
	No	277	80	5.24±0.875	6.00±0.66	11.24±1.26	
Professional Status of the Father *	Yes	259	75	5.26±0.75	6.02±0.66	11.28±1.27	0.438
	No	88	25	5.32±0.80	6.03±0.67	11.35±1.32	
Educational Status of the Mother **	Illiterate	7	2	5.37±0.62	6.03±0.40	11.40±0.74	0.028
	Primary or secondary school	317	91	5.24±0.77^a	5.99±0.66^a	11.23±1.29^a	
	University graduate or above	22	7	5.68±0.63^a	6.32±0.64^a	12.00±1.08^a	
Educational Status of the Father **	Illiterate	3	1	5.84±0.26	6.07±0.13	11.92±0.23	0.386
	Primary or secondary school	260	75	5.25±0.74	6.01±0.66	11.26±1.26	
	University graduate or above	82	24	5.34±0.82	6.06±0.70	11.41±1.38	
Family Income Status **	Income is equal to expenditure	259	74	5.22±0.73	5.97±0.65	11.20±1.23	0.003
	Income is less than expenditure	38	11	5.29±0.81	5.97±0.79	11.27±1.45	
	Income is more than expenditure	50	15	5.54±0.85^a	6.31±0.57^a	11.86±1.32^a	
History of chronicle Illness in the Family *	Yes	103	30	5.30±0.80	6.07±0.64	11.38±1.29	0.313
	No	245	70	5.26±0.74	5.99±0.67	11.25±1.27	
Existence of Disabled Family Member	Yes	10	3	5.77±0.83	6.22±0.64	12.00±1.32	0.142
	No	339	97	5.26±0.76	6.01±0.66	11.28±1.27	
Permanent co-existence of the family members*	Yes	39	11	5.28±0.63	5.95±0.67	11.23±1.15	0.719
	No	310	89	5.27±0.78	6.03±0.66	11.31±1.30	
Mortality among the family members?*	Yes	25	7	5.38±0.70	6.15±0.64	11.54±1.20	0.280
	No	324	93	5.26±0.77	6.01±0.66	11.28±1.28	

* T-Test ** One Way ANOVA Test ^a p<0.05 ^b p<0.001

Table 2. Psychometric properties of the Compassion of Others' Lives Scale

Item number	Items	Mean ± SD	Corrected Item-Total Correlation	Cronbach's Alpha if item deleted	Cronbach's Alpha
Empathy items					
1.	I feel the emotions of other people	5.27±1.13	0.615	0.867	0.878
2.	I understand people's feelings	5.53±0.98	0.666	0.866	
3.	I consider myself sensitive to others	5.67±0.92	0.466	0.874	
4.	Other people's emotions affect me	5.35±1.18	0.493	0.873	
5.	I worry about people in worse situation than me	5.52±1.09	0.593	0.868	
6.	I am caring to others	5.46±1.02	0.647	0.866	
7.	I have the ability to place myself in another's life position	5.30±1.22	0.661	0.864	
8.	I can project myself into someone else's feelings	4.74±1.37	0.628	0.866	
9.	I am naturally aware of the feelings and emotions of another	5.30±1.12	0.724	0.861	
10.	When I relate to another individual I picture myself in a similar situation	5.27±1.31	0.567	0.867	
11.	I get concerned when I see others in pain or suffering	5.74±1.14	0.550	0.870	
12.	I am loving towards others who are feeling emotional pain	4.86±1.51	0.423	0.879	
13.	It makes me sad to see a lonely stranger	4.54±1.54	0.372	0.883	
Alleviate suffering items					
14.	I like helping others when I see that my assistance leads them from their distress	6.36±0.88	0.516	0.873	0.880
15.	When I know how someone feels I am more likely to help	6.03±0.92	0.615	0.869	
16.	I feel obligated to help someone if they appear to be in a significant amount of pain	6.04±0.99	0.684	0.865	
17.	If I notice someone close to me is going through a hard time emotionally I feel obligated to talk to them about it	5.96±1.06	0.566	0.871	
18.	I am willing to help out anyone who clearly needs it regardless of whether or not it benefits me	6.00±0.98	0.622	0.868	
19.	if someone is my friend, I am always there to help them	6.40±0.87	0.604	0.869	
20.	I am willing to help most people because it ultimately makes me feel good about myself	5.98±1.05	0.601	0.869	
21.	I don't have to be paid to help others.	6.27±1.21	0.325	0.885	
22.	I always feel obligated to help a person who seems in trouble regardless of the circumstances	5.66±1.14	0.689	0.863	
23.	When someone is in danger I tend to be the first to intervene and see how I can help.	5.39±1.17	0.579	0.870	
24.	I can't help but feel very sorry for a person who is starving	5.55±1.27	0.538	0.873	
25.	I would help up a stranger who has tripped and fell.	6.08±1.07	0.524	0.873	
26.	I would hold a door open for a person who is disabled.	6.53±0.76	0.546	0.873	
The Compassion Of Others' Lives Scale					0.919

Table 3. Comparison of the The Compassion Of Others' Lives Scale Test-Retest, Mean Scores and Correlations

Application	n	Mean \pm SD	t	p^*	r^{**}
Test	349	11.30 \pm 1.28	-1.620	.108	.693 (.576-.782)
Retest	100	11.27 \pm 1.45			$p < .001$

*Paired samples t test; ** Intraclass correlation coefficient test

Table 4. Results of the Principal Components Analysis with Varimax Rotation of the COOL scale

Item number	Items	Factor 1	Factor 2
16	I feel obligated to help someone if they appear to be in a significant amount of pain	.76	
22	I always feel obligated to help a person who seems in trouble regardless of the circumstances	.73	
19	If someone is my friend, I am always there to help them	.68	
18	I am willing to help out anyone who clearly needs it regardless of whether or not it benefits me	.68	
15	When I know how someone feels I am more likely to help	.64	
20	I am willing to help most people because it ultimately makes me feel good about myself	.63	
17	If I notice someone close to me is going through a hard time emotionally I feel obligated to talk to them about it	.63	
26	I would hold a door open for a person who is disabled.	.59	
24	I can't help but feel very sorry for a person who is starving	.58	
25	I would help up a stranger who has tripped and fell.	.58	
23	When someone is in danger I tend to be the first to intervene and see how I can help.	.57	
14	I like helping others when I see that my assistance leads them from their distress	.55	
21	I don't have to be paid to help others.	.34	
13	It makes me sad to see a lonely stranger	.31	
2	I understand people's feelings		.77
9	I am naturally aware of the feelings and emotions of another		.76
1	I feel the emotions of other people		.75
7	I have the ability to place myself in another's life position		.74
8	I can project myself into someone else's feelings		.71
6	I am caring to others		.68
10	When I relate to another individual I picture myself in a similar situation		.63
3	I consider myself sensitive to others		.55
5	I worry about people in worse situation than me		.52
4	Other people's emotions affect me		.50
11	I get concerned when I see others in pain or suffering		.42
12	I am loving towards others who are feeling emotional pain.		.41
Eigenvalue		9.025	2.442
% of variance		34.70	9.39
Cumulative % of variance		44.10	

Table 5. Correlation between the COOL scale and the other scales

Scales	r	p
COOL scale, empathy subscale-COOL Scale total score	0.910**	<0.001
COOL scale, empathy subscale - Emphatic Tendency Scale Score	0.343**	<0.001
COOL Scale, alleviate suffering subscale - COOL Scale total	0.880**	<0.001
COOL Scale, alleviate suffering subscale - Self-Compassion Scale score	0.172**	<0.001
COOL scale total score-Emphatic Tendency Scale Score	0.386**	<0.001
COOL scale total score –Self Compassion Scale score	0.218**	<0.001
* Pearson Correlation Test		
** Correlation is significant at the 0.01 level (2-tailed)		

Validity

Convergent/Discriminant Validity

All items in the COOL Scale produced significant differences between the upper 27% group and the lower 27% group ($p < 0.001$).

Construct validity

The Kaiser-Meyer-Olkin (KMO) for the 26-item the COOL scale was 0.913 and the Bartlett's test for sphericity was significant.

Criterion-Related Validity

The study found positive and medium correlation and statistically significant relationship between the empathy subscale of the COOL scale and Emphatic Tendency Scale score ($r = 0.343, p < .001$). We also found statistically significant relationship and medium correlation between the total COOL score and the Emphatic Tendency Scales score ($r = 0.386, p < .001$). Besides, we found statistically significant but weak correlation between the total scores of alleviate suffering subscale of the COOL and the Self-Compassion Scale ($r = 0.172, p < .001$). Finally, this study found statistically significant but weak correlation between the total scores of the COOL and the Self-Compassion Scale ($r = 0.218, p < .001$).

Discussion

This study aimed to test the reliability and validity of the Turkish version of the Compassion of Others' Lives Scale so that the scale can be used for Turkey. Cronbach's Alpha coefficients for the Turkish version of the COOL scale and the subscales of empathy and alleviate suffering were 0.919, 0.878 and 0.880, respectively. Given that the appropriate Cronbach's alpha coefficients varied between 0.70 and 0.95, the coefficients of this study are

acceptable (Tavakol, 2011). The original study had the Cronbach's alpha coefficient of 0.98 for the empathy subscale and 0.89 for alleviate suffering subscale. The application of the original scale on two different samples found the Cronbach's alpha coefficient as 0.87 and 0.89 (Chang, Fresco & Green, 2014). In this sense, the Cronbach's alpha values of the Turkish version of the scale resembled to the original scale.

Test-retest reliability has been analyzed in order to find the extent to which the scale was consistent over time. In this study, test-retest reliability had a positive and significant correlation of 0.69. This finding indicates that the Turkish version of the COOL scale produces consistent results over time and that test-retest reliability has been maintained. In the original study, Chang found that the test-retest reliability score for the empathy and the alleviate suffering subscales were 0.87 and 0.88, respectively (Chang, Fresco & Green, 2014). It has been stated that the correlation should not be negative and that each item should be loaded with a factor of at least 0.30 during the item analysis (Cortina, 1993). In this study on the Turkish version of the COOL scale, correlation coefficients of all items were positive and their factor loads ranged between 0.31 and 0.77.

The study found positive and medium correlation and statistically significant relationship between the empathy subscale of the COOL scale and Emphatic Tendency Scale score. Besides, statistically significant medium correlation was found between the total COOL scale score and the Emphatic Tendency Scale score. In their study, Chang et al. found a correlation between the COOL scale score and the Measure of Emotional Empathy scale score, which was not meaningful (Chang, Fresco & Green,

2014). However, they also found statistically meaningful and strong correlation between the empathy subscale and the Measure of Emotional Empathy scale (Chang, Fresco & Green, 2014).

This study found statistically meaningful but weak correlation between the total scores of alleviate suffering subscale of the COOL and the Self-Compassion Scales. Besides, it was found statistically meaningful but weak correlation between the total scores of the COOL and the Self-Compassion Scale. In their study, Chang et al. found correlation between the COOL and the Self-Compassion Scale, which was not significant (Chang, Fresco & Green, 2014).

This study used exploratory factor analysis in order to evaluate the reliability of the factorial structure of the scale. We found that the items were concentrated on two factors as it was in the original score. The factor analysis revealed that these two factors explained 44.10% of the total variance. Factor 1, alleviate suffering subscale, had the most important contribution to the total variance with a variance of 34.70%. The 13th item, which was placed under the empathy subscale in the original scale was placed under alleviate suffering subscale in this study. We believe that this may be related with the helping the foreigners is an appreciated behavior in Turkish culture (Kırca, 2010). Given that the factor loads of the items were generally strong, we did not make further changes in the Turkish version of the scale and we protected the factors as they were in their original form.

This study shows that demographic characteristics should be taken into account while dealing with compassion, professional education, parents' education and income levels and the existence of one or more family members with disabilities may influence the level of compassion.

Conclusions

Nursing is a profession with a high need for being compassionate. The Compassion of Others' Lives Scale might be helpful for measuring compassion level in health professionals. The findings of this study show that the Turkish translation of the COOL scale is a valid and reliable measurement tool. Demographic characteristics should be taken into account while dealing with compassion.

References

- Adamson E. & Dewar B. (2011). Compassion in the nursing curriculum: making it more explicit. *Journal of Holistic Healthcare*. 8(3): 42-45.
- Akın U., Akın A. & Abacı R. (2007). Self-compassion scale: the study of validity and reliability. *Hacettepe University Journal of Education*. 33: 1- 10. (in Turkish)
- Aycock N. & Boyle D. (2009). Interventions to manage compassion fatigue in oncology nursing. *Clinical Journal of Oncology Nursing*. 13(2):183-91
- Carter M. (2014). Vocation and altruism in nursing: the habits of practice. *Nursing Ethics*. 21(6):695-706.
- Chang J., Fresco J. & Green B. (2014). The development and validation of the compassion of others' lives scale. *International Journal of Humanities and Social Sciences*. 4(5): 33-42.
- Cortina J.M. (1993). What is Coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*. 78(1): 98-104.
- Dökmen U. (1988). Developing measurement models for empathy with reference to a psychodrama. *Ankara University Journal of Faculty of Educational Sciences*. 6:(219), 155–190. (in Turkish)
- Gelhaus P. (2012). The desired moral attitude of the physician: (II) compassion. *Medicine, Health Care and Philosophy*. 15(4): 397- 410.
- Georges J.M. (2013). An emancipatory theory of compassion for nursing. *Advances in Nursing Science*. 36(1):2-9.
- Gjersing L., Caplehorn J.R. & Clausen T. (2010). Cross-cultural adaptation of research instruments: language, setting, time and statistical considerations. *BMC Medical Research Methodology*. 10;10: 13.
- Hunsaker S., Chen H.C., Maughan D. & Heaston S. (2015). Factors that influence the development of compassion fatigue, burnout, and compassion satisfaction in emergency department nurses. *Journal of Nursing Scholar*. 47(2):186-94.
- Kırca H.S. (2010). Turkey And The Image Of Turks According To The Work Of Traveller Sir Charles Fellows. Master Thesis. University of Suleyman Demirel, Graduate School of Social Sciences, Department of English Language and Literature, (in Turkish)
- Lee W., Veach P.M., MacFarlane I.M. & LeRoy S.B. (2015). Who is at risk for compassion fatigue? An investigation of genetic counselor demographics, anxiety, compassion satisfaction, and burnout. *Journal of Genetic Counseling*. 24(2):358-70.
- Richardson C., Percy M. & Hughes J. (2015). Nursing therapeutics: Teaching student nurses care, compassion and empathy, *Nurse Education Today*. 35(5):e1-5.

- Schantz M.L. (2007). Compassion: a concept analysis. *Nursing Forum*. 42(2): 48-55
- Sheppard K. (2015). Compassion fatigue among registered nurses: connecting theory and research. *Applied Nursing Research*. Feb;28(1):57-9.
- Straughair C. (2012). Exploring compassion: implications for contemporary nursing. Part 1. *British Journal of Nursing*. 21(3): 160-164.
- Tavakol M. & Dennick R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*. 2: 53-55.
- Tinsley H.E. & Tinsley D.J.(1987).Uses of factor analysis in counselling psychological research. *Journal of Counseling Psychology*.34(4):414-424
- Van der Cingel M. (2011). Compassion in care: a qualitative study of older people with a chronic disease and nurses. *Nursing Ethics*. 18(5):672-85.
- Van der Cingel M. (2014). Compassion: The missing link in quality of care. *Nurse Education Today*. 34(9): 1253-7.
- Wiklund G.L. & Wagner L. (2013). The butterfly effect of caring – clinical nursing teachers' understanding of self-compassion as a source to compassionate care. *Scandinavian Journal of Caring Sciences*. 27(1):175-83.
- Wood C. (2014). Choosing the 'right' people for nursing: can we recruit to care? *British Journal of Nursing*. 23(10): 528-530.
- Yesil A., Ergun U., Amasyali C., Er F., Olgun N.N. & Aker A.T.(2010) Validity and reliability of the Turkish version of the professional quality of life. *Archives of Neuropsychiatry*. 47: 111-117.(in Turkish)