

The relationship between self-efficacy level and stress coping style in nurses living in the Turkish Republic of Northern Cyprus: descriptive research

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Received: 08/08/2024

Accepted: 04/09/2024

Published: 20/09/2024

Cite this article: Güngör, A. E., & Dolu Kubilay, Ş. (2024). The relationship between self-efficacy level and stress coping style in nurses living in the Turkish Republic of Northern Cyprus: descriptive research. *J Nurs Care Res.* 1(3),71-78.

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ABSTRACT

Aims: The aim of this study was to determine the relationship between self-efficacy level and coping styles with stress in nurses working in the Turkish Republic of Northern Cyprus.

Methods: The descriptive cross-sectional study was conducted on 350 nurses between 01-30 July 2020. The study data were collected with a descriptive questionnaire, self-efficacy scale and stress coping styles scale.

Results: According to the results of the study, 80.9% of the nurses were female, 19.1% were male, the majority were between the ages of 25-29, 51.1% were single, 48.6% had been working as a nurse for 1-5 years, and 76.6% worked as a clinical nurse. It was determined that the nurses participating in the study used 'self-confident approach, helpless approach, resorting to social support, optimistic approach and submissive approach' as coping style with stress, respectively. It was determined that the mean total score of the self-efficacy scale of the nurses was 85.83 ± 12.68 , which was at a good level, and the sub-dimensions were 'starting the behaviour, maintaining the behaviour, completing the behaviour and struggling with obstacles', respectively. In the study, it was determined that as the use of all sub-dimensions of the self-efficacy scale increased, the use of 'resorting to social support' and 'self-confident approach' as a coping style with stress increased and the use of 'helpless approach' and 'submissive approach' decreased.

Conclusion: In this study, it was determined that the use of active problem-solving orientated approaches increased and the use of passive approaches decreased in all areas of self-efficacy in coping with stress. Providing in-service trainings that will increase the self-efficacy skills of nurses will ensure the use of active problem-based methods in coping with stress.

Keywords: Nurse, self-efficacy, stress coping style

INTRODUCTION

Living beings try to cope with stress since the beginning of life and develop coping methods for this purpose. According to Connan, the feeling of stress occurs as a result of the individual's internal-natural balance being damaged by environmental and external factors. In the studies on stress, it is stated that stress causes psychological and physiological problems especially in busy professional groups and negatively affects the health of individuals and naturally their organisational success (Koç et al., 2017; Akbal et al., 2001; Çankaya&Çiftçi 2019). The importance of this concept has increased since nurses, who are often together with patients in hospitals, are exposed to stress risk factors such as intense work pace, poor working conditions, challenging tasks, role ambiguities and role conflicts, lack of regular sleep, inadequate and balanced nutrition, and shift work system (Koç et al., 2017; Çankaya&Çiftçi 2019; Akyürek et al., 2005).

Self-efficacy, which was first brought to the agenda by Albert Bandura in 1977, has become important in recent years, along with the importance of self-belief for human beings. Self-efficacy, which is one of the basic elements of Bandura's social learning theory, is one of the important phenomena affecting the behaviours of the individual (Bandura, 1978). The concept of self-efficacy is defined as 'the ability of an individual to control, organise, organise and manage the situations and events around him/her that may affect his/her life in line with his/her goals, to control, organise, organise and manage the necessary activities in order to successfully perform a task that is required or expected of him/her related to a certain task he/she undertakes or is given, to achieve a certain result, to overcome the problems that may be encountered in the future; to be able to initiate and continue a behaviour in a way that can be effective on them; to be able to provide

the necessary motivation; his/her judgements, beliefs and perceptions about himself/herself related to his/her social, cognitive, emotional and behavioural capacities, abilities, skills and awareness, and the feeling of feeling the level of his/her influence on them' (Bandura, 1982; Judge et al. 2007; Sertbaş & Sergek, 2006). Self-efficacy is generally the belief that an individual can cope with stress or difficult situations when exposed to any stress or difficult situations. Self-efficacy perception, which affects people's way of thinking and emotional reactions, affects an individual's belief in his/her ability to perform a task, his/her stress level, motivation and determination. Individuals with high self-efficacy perception show the necessary struggle to achieve their goals when faced with a failure and can control their emotions better. This situation also reveals the importance of self-efficacy belief in coping with stress (Bandura, 1982; Otacioğlu, 2008; Schwarzer & Fuchs, 1995; Sertbaş & Sergek, 2006; Ersarı et al. 2017; Zengin, 2007).

Self-efficacy is of great importance for nurses to be psychologically resilient and contributes to the person to be professionally strong at the same time (Büyükbayram & Çam 2017). The International Council of Nurses (ICN) emphasised the importance of the concept of power in nursing with the theme of 'nurses; a vital resource for health, a force for change' for power in nursing and revealed the importance of self-efficacy for strong nurses (nurses: a force for change: improving health systems' resilience ICN 2016).

The aim of this study was to determine the relationship between self-efficacy level and coping styles with stress in nurses working in the Turkish Republic of Northern Cyprus (TRNC).

METHODS

Ethical Aspects of the Study

Before starting the study, the ethics committee approval was obtained from the Ethics Committee of Cyprus Science University Graduate Training and Research Institute (Date: 29.06.2020, Decision No: 12). With the approval of the ethics committee, an application was made to the Cyprus Turkish Midwives and Nurses Association and the necessary permission was obtained to conduct the study with the members of the association. Before starting to answer the questions from the nurses who volunteered to participate in the study, the questionnaire questions were opened after they gave their consent to the consent statement in which the purpose of the research, the voluntary participation in the research, and that the information obtained from the research would be used only for scientific purposes were explained. Each stage of the research was conducted in accordance with the Declaration of Helsinki.

Material and Method

The research was conducted in descriptive cross-sectional type. The population of the research consisted of nurses working in TRNC and members of the Turkish Cypriot Nurses and Midwives Association. The number of actively registered nurses in the said union is approximately 1100 and the sample size was determined to reach at least 285 people with a 90% confidence interval and the research was completed with 350 nurses.

Data Collection Tools

In the study, data were collected with a 'descriptive questionnaire form', 'self-efficacy scale' and 'stress coping styles scale'. The questionnaire form and scales used in the study were made online via Google forms and collected between 01-30 July 2020. A written application was made to obtain the necessary permission from the Turkish Cypriot Nurses and Midwives Association for the conduct of the study in question, and after obtaining the permission, the survey form was shared by giving information about the research to the e-mail addresses of the nurses registered to the association due to the COVID-19 pandemic period and the social media tools that the association reached its members, and the research data were collected after obtaining consent from those who wanted to participate in the study.

Descriptive Survey Form: It was created by the researcher and consists of questions about some sociodemographic characteristics and working conditions of nurses.

Self-Efficacy Scale (SEES): The scale, developed by Sherer and his colleagues in 1982, examines the behaviours of individuals and the changes in their behaviours (Sherer & Adams, 1982). The scale was adapted into Turkish and its validity and reliability was conducted by Gözüüm and Aksayan in 1999. The scale consists of 23 items and according to 5-point Likert type; 1 (does not define me at all), 2 (defines me a little), 3 (I am undecided), 4 (defines me well), 5 (defines me very well). In the scale; the scoring of items 2, 4, 5, 6, 7, 7, 10, 11, 12, 12, 14, 16, 17, 18, 20 and 22 are reversed. There are four sub-factors in the scale and the items defining the factors are as follows;

- Starting the behavior: Items 2, 11, 12, 14, 17, 18, 20, and 22
- Initiation of behaviour: Items 4, 5, 6, 7, 10, 16, and 19,
- Maintaining behaviour: Items 3, 8, 9, 15 and 23
- Overcoming obstacles: Items 1, 13, and 21

The score range of the scale is between 23-115 and a high score is considered as a high self-efficacy perception. In the study conducted by Aksayan and Gözüüm (1998), Cronbach's alpha value was found to be ,81 and 82 in this study (Gözüüm & Aksayan 1998).

Stress Coping Styles Scale (SCSS): Developed in 1980 by Folkman and Lazarus, this scale is a scale whose validity is accepted in stressful situations. Şahin and Durak (1995) transformed the original 66-item scale into a 30-item scale and performed its Turkish validity and reliability.

In the scoring of the scale, each item is scored separately and some items (9 and 1) are reverse scored and the total score is calculated. The sub-dimensions of the scale are;

- Approach to apply for social support: 1, 9, 29, and 30
- Self-confident approach: 8, 10, 14, 16, 20, 23, and 26
- Optimistic approach: 2, 4, 12, 18, and 28
- Helpless approach: 3, 7, 11, 19, 22, 25, and 27
- Submissive approach: 5, 13, 15, 17, 21, and 24

Cronbach alpha reliability coefficients were determined between 0.47 - 0.45 for 'resorting to social support', between 0.62-0.80 for 'self-confident approach', between 0.68-0.49 for 'optimistic approach', between 0.64-0.73 for 'helpless approach' and between 0.47-0.72 for 'submissive approach'

by Durak and Şahin. In the present study, it was determined as .36 in the 'resorting to social support' approach, .88 in the 'self-confident approach', .78 in the 'optimistic approach', .72 in the 'helpless approach' and .72 in the 'submissive approach' (Şahin & Durak 1995).

Statistical Analysis

In this study, the data were analysed with version 25.0 (demo) of the Statistical Package for Social Sciences (SPSS) programme. In the evaluation, numbers and percentages were used and Kolmogorov Smirnov test was performed for the conformity of the scale scores to normal distribution. Since the scale scores did not conform to the standard normal distribution, Mann Whitney U test was used for pairwise group comparisons and Kruskal Wallis test was used for comparisons between more than two groups. Spearman's rho correlation analysis was used in correlational screening analyses. All analyses were performed at 95% confidence interval.

RESULTS

Table 1 shows the descriptive characteristics of the participants in the study. It was determined that 34% of the nurses were between the ages of 25-29, 80.9% were 'female', 51.1% were 'single', 52.9% had a bachelor's degree, 59.7% had no children, 68.6 % no smoking, 65.7% no alcohol and 82% had no chronic health problems.

| Descriptive feature | Number (n) | Percent (%) |
|------------------------|-------------------------------|-------------|
| Age | 20-24 years old | 60 17.1 |
| | 25-29 years old | 119 34.0 |
| | 30-34 years old | 67 19.1 |
| | 35- 39 years old | 53 15.1 |
| | 40 age and over | 51 14.6 |
| Gender | Male | 67 19.1 |
| | Famele | 283 80.9 |
| Marital status | Married | 157 44.9 |
| | Single | 193 55.1 |
| Education status | Health vocational high school | 29 8.3 |
| | Associate degree | 53 15.1 |
| | Licence | 185 52.9 |
| | Postgraduate | 83 23.7 |
| Smoking | Yes | 110 |
| | No | 240 31.4 |
| Alcohol | Yes | 120 68.6 |
| | No | 230 34.3 |
| Having health problems | Yes | 63 65.7 |
| Status | No | 287 18.0 |

SCSS : Nurses' Stress Coping Styles Scale, SSE: Self-efficacy scale, Min: Minimum, Max: Maximum, SD: Standard deviation

Some professional characteristics of the nurses are given in Table 2. It is seen that 48.6% of the nurses worked between 1-5 years, 78.6% chose the nursing profession willingly, 22.6% worked in the 'emergency department' and 76.6% worked as 'clinic nurse'. When the distribution of the working patterns

of the nurses was analysed, it was seen that 57.7% worked in shifts, 33.7% worked continuously during the day and 8.6% worked continuously at night.

| Some professional characteristics | n | Percent % |
|---|---------------------------|-----------|
| The status of choosing the nursing profession willingly | Yes | 275 78.6 |
| | No | 75 21.4 |
| Working time | 1-5 years | 170 48.5 |
| | 6-10 years | 63 18.0 |
| | 11-15 years | 52 14.9 |
| | 16-20 years | 30 8.6 |
| | 21 years and over | 35 10.0 |
| Department | Internal units | 57 16.3 |
| | Surgical units | 19 5.4 |
| | Intensive care | 44 12.6 |
| | Emergency service | 79 22.6 |
| | Operating theatre | 18 5.1 |
| | Polyclinic | 69 19.7 |
| | Other | 64 18.3 |
| Mission | Clinic nurse | 268 76.6 |
| | Service responsible nurse | 50 14.3 |
| | Other | 32 9.1 |
| Term of office | Less than 1 year | 82 23.4 |
| | 1-5 years | 183 52.3 |
| | 6-10 years | 46 13.1 |
| | 11-15 years | 19 5.4 |
| | 16 years and over | 20 5.8 |
| Mode of operation | Continuous daytime | 118 33.7 |
| | Continuous night | 30 8.6 |
| | Shift change | 202 57.7 |

Table 3 shows the mean scores of the nurses in the sub-dimensions of the SSE and the total mean scores of the SCSS.

| Scales | Min | Max | X±SD |
|---------------------|-----------------------------|--------------|-------------|
| SCSS sub-dimensions | Applying for social support | 8.00 16.00 | 12.83±1.75 |
| | Confident approach | 11.00 28.00 | 20.46±4.34 |
| | Optimistic approach | 6.00 20.00 | 12.44±2.44 |
| | The desperate approach | 7.00 25.00 | 14.30±3.8 |
| | Submissive approach | 6.00 20.00 | 11.40±3.33 |
| Self-efficacy scale | Scale total score | 57.00 108.00 | 85.83±12.68 |
| SSE sub-dimensions | Starting behaviour | 15.00 37.00 | 30.09±4.91 |
| | Maintaining behaviour' | 13.00 35.00 | 26.66±5.62 |
| | Initiation of behaviour | 6.00 25.00 | 18.88±4.58 |
| | Sustaining behaviour | 5.00 15.00 | 10.19±2.09 |

SCSS : Nurses' Stress Coping Styles Scale, SSE: Self-Efficacy Scale, Min: Minimum, Max: Maximum, X: Mean, SD: Standard deviation

It was found that the mean scores of the nurses in the sub-dimensions of the SSE were confident approach 20.46±4.34, The desperate approach 14.3±3.8, applying for social support 12.83±1.75, optimistic approach 12.44±2.44, and Submissive approach 11.4±3.33 . It was found that the mean total score

of the nurses was 85.83±12.68 and the mean scores related to the sub-dimensions were 'starting behaviour' 30.09±4.91, 'maintaining behaviour' 26.66±5.62, 'completing behaviour' 18.88±4.58, and 'struggling with obstacles' 10.19±2.09, respectively.

In Table 4, the mean scores of the nurses who participated in the study were compared according to the descriptive characteristics of the nurses who participated in the study. Accordingly, according to the gender of the nurses who participated in the study, 'self-confident approach' (p: 0.001), 'optimistic approach' (p: 0.001) and 'helpless approach' (p: 0.01); according to age, 'self-confident approach' (p: 0.001) and 'optimistic approach' (p: 0.001) according to age, 'submissive approach' (p: 0.098) according to marital status, and only 'submissive approach' (p: 0.045) according to alcohol use (p<0.05). In terms of the total scores of the nurses participating in the study, only the difference between the mean scores according to age and marital status was found to be significant (p<0.05).

Table 5 comparison of the mean scores of the nurses according to education and some professional characteristics of the nurses according to the subgroups of the SCSS and self-reported total scores.

Accordingly, the difference between the mean scores of 'resorting to social support' was found to be significant (p: 0.092), 'self-confident approach' (p: 0.001) and 'submissive approach' (p: 0.007), and no difference was found between the mean scores of 'optimistic approach' (p: 0.044) and

'helpless approach' (p: 0.63) (p<0.05). There was no statistical difference between the mean scores of 'resorting to social support' (p: 0.001), 'self-confident approach' (p: 0.014), 'optimistic approach' (p: 0.029) and 'submissive approach' (p: 0.01) (p<0.05), and a significant difference was found between the mean scores of 'self-confident approach' (p: 0.011), 'optimistic approach' (p: 0.001) and 'submissive approach' (p: 0.041) according to the position in the department (p<0.05). A statistically significant difference was found between the mean scores of 'applying for social support' (p: 0.014), 'self-confident approach' (p: 0.001), 'optimistic approach' (p: 0.001) and 'submissive approach' (p: 0.002) according to the working year (p<0.05), and a significant difference was found between the mean scores of 'optimistic approach' (p: 0.016) and 'helpless approach' (p: 0.04) according to the working style of the nurses (p<0.05).

It was found that there was a statistically significant difference between the mean total score of the nurses and their graduation status, and in the further statistical analysis, it was detected that the difference was between the groups with associate's degree-bachelor's degree and associate's degree-graduate degree, and the mean self-efficacy score of the nurses with associate's degree was higher than the nurses with bachelor's degree and lower than the nurses with graduate degree (p<0.05). According to the department in which they work. When the mean total score of self-efficacy was compared, it was determined that the difference was statistically significant (p<0.05), and with further statistical analysis, it was determined that the difference was between the

Table 4. Comparison of SCSS sub-dimension and SSE mean scores according to the descriptive characteristics of nurses

| Feature/scale | SCSS | | | | | | | | | | | |
|-------------------------------|-----------------------------|--------------|--------------------|--------------|---------------------|--------------|-------------------|--------------|---------------------|--------------|-----------------|--------------|
| | Applying for social support | | Confident approach | | Optimistic approach | | Helpless approach | | Submissive approach | | SSE total score | |
| | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p |
| Gender | | | | | | | | | | | | |
| Female | 12.77±1.72 | 8.416 | 20.07±4.30 | 7.005 | 12.25±2.47 | 7.087 | 14.52±3.87 | 11.213 | 11.28±3.33 | 8.425 | 85.57±12.27 | 8.686 |
| Male | 13.06±1.87 | 0.147 | 22.10±4.11 | 0.001 | 13.24±2.17 | 0.001 | 13.34±3.34 | 0.001 | 11.91±3.29 | 0.154 | 86.90±14.30 | 0.286 |
| Age | | | | | | | | | | | | |
| 20-24 years | 12.50±1.82 | | 18.37±4.63 | | 11.40±2.51 | | 14.93±3.84 | | 12.07±3.15 | | 81.23±12.35 | |
| 25-29 years | 12.65±1.88 | | 20.41±4.36 | | 12.38±2.33 | | 14.10±3.98 | | 11.08±3.12 | | 85.03±12.05 | |
| 30-34 years | 13.12±1.71 | 7.861 | 20.37±4.52 | 24.429 | 12.34±2.65 | 35.417 | 14.45±4.62 | 3.943 | 11.67±4.19 | 8.501 | 83.76±14.18 | 33.592 |
| 35-39 years | 13.02±1.57 | 0.097 | 21.40±3.47 | 0.001 | 13.75±1.83 | 0.001 | 14.08±2.69 | 0.414 | 11.85±2.82 | 0.075 | 87.45±12.89 | 0.001 |
| 40 and above | 13.06±1.48 | | 22.16±3.53 | | 12.59±2.36 | | 14.04±3.12 | | 10.57±3.09 | | 94.14±7.40 | |
| Marital status | | | | | | | | | | | | |
| Married | 12.92±1.66 | 14.322 | 20.94±3.75 | 13.218 | 12.68±2.27 | 13.349 | 14.05±3.83 | 16.568 | 11.17±3.52 | 16.701 | 87.85±12.24 | 13.061 |
| Single | 12.75±1.81 | 0.372 | 20.07±4.74 | 0.004 | 12.25±2.57 | 0.053 | 14.50±3.78 | 0.130 | 11.60±3.17 | 0.098 | 84.19±12.82 | 0.026 |
| Smoking | | | | | | | | | | | | |
| Smokes cigarettes | 12.68±1.72 | 13.855 | 21.06±4.29 | 11.615 | 12.65±2.03 | 11.555 | 14.25±3.26 | 13.164 | 11.64±3.02 | 11.987 | 86.32±12.47 | 12720 |
| Does not smoke | 12.9±1.76 | 0.449 | 20.18±4.34 | 0.07 | 12.35±2.61 | 0.058 | 14.32±4.03 | 0.967 | 11.3±3.46 | 0.165 | 85.60±12.79 | .585 |
| Alcohol use | | | | | | | | | | | | |
| Drinking alcohol | 12.68±1.7 | 14.655 | 20.05±4.4 | 14.883 | 12.4±2.54 | 14.100 | 13.87±3.59 | 14.712 | 10.9±3.04 | 15.593 | 85.97±13.56 | 13.518 |
| Does not drink alcohol | 12.9±1.77 | 0.334 | 20.67±4.3 | 0.227 | 12.47±2.39 | 0.736 | 14.52±3.9 | 0.300 | 11.67±3.45 | 0.045 | 85.76±12.22 | 0.753 |
| Chronic health problem | | | | | | | | | | | | |
| No | 12.9±1.74 | 10213 | 20.37±4.48 | 8.233 | 12.43±2.56 | 8591 | 14.24±4.02 | 8112.5 | 11.47±3.45 | 9.452 | 87.05±12.70 | 8.314 |
| Yes | 12.49±1.76 | 0.102 | 20.87±3.64 | 0.265 | 12.52±1.84 | 0.532 | 14.54±2.59 | 0.200 | 11.08±2.73 | 0.569 | 85.56±12.68 | 0.317 |

SCSS: Stress coping styles scale, SSE: Self-efficacy scale, X: Mean, SD: Standard deviation

Table 5. Comparison of SCSS and SSE total score averages of nurses according to education and some professional characteristics

| Characteristic | SCSS | | | | | | | | | | | |
|-------------------------------|-----------------------------|-----------------|-----------------|-----------------|---------------------|-----------------|-------------------|----------------|---------------------|-----------------|-------------|-----------------|
| | Referring to social support | | Secure approach | | Optimistic approach | | Helpless approach | | Submissive approach | | SSE score | |
| | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p | X±SD | Test value p |
| Graduation status | | | | | | | | | | | | |
| Health vocational high school | 12.93±1.39 | | 20.79±5.22 | | 13.55±3.01 | | 16.14±4.25 | | 13.66±4.58 | | 81.17±14.05 | |
| Associate degree | 12.7±1.74 | 6.433 0.092 | 21.79±4.28 | 17.626 0.001 | 12.85±2.59 | 8.117 0.044 | 14.45±3.86 | 7.296 0.063 | 12±3.86 | 12.113 0.007 | 87.09±13.82 | 18.370 0.001 |
| Licence | 12.67±1.82 | | 19.58±4.31 | | 12.14±2.45 | | 13.92±3.91 | | 11.25±2.91 | | 84.21±12.56 | |
| Postgraduate | 13.23±1.66 | | 21.45±3.68 | | 12.48±1.96 | | 14.39±3.17 | | 10.57±2.97 | | 90.25±10.35 | |
| Place of duty | | | | | | | | | | | | |
| Internal units | 11.68±1.73 | | 19.4±4.55 | | 12.04±2.73 | | 14.7±4.04 | | 11.95±3.55 | | 80.37±12.13 | |
| Surgical units | 12.79±0.79 | | 17.42±3.49 | | 11.32±2.26 | | 12.74±3.60 | | 10.84±2.61 | | 82.00±14.30 | |
| Intensive care | 13.41±2.02 | | 20.77±4.42 | | 12.95±2.45 | | 13.86±3.33 | | 12.09±2.71 | | 84.91±14.05 | |
| Emergency service | 13.08±1.84 | 30.354 0.001 | 21.00±4.44 | 15.988 0.014 | 12.77±2.4 | 14.085 0.029 | 15.24±3.97 | 7.518 0.276 | 12.20±3.83 | 16.892 0.010 | 85.52±13.13 | 24.050 0.001 |
| Operating theatre | 13.11±0.76 | | 20.78±2.6 | | 13.22±1.35 | | 13.78±1.86 | | 10.89±2.49 | | 92.67±11.57 | |
| Polyclinic | 12.81±1.46 | | 20.23±4.16 | | 12.28±2.25 | | 13.77±3.59 | | 10.32±2.49 | | 86.33±11.20 | |
| Other | 13.09±1.75 | | 21.56±4.31 | | 12.34±2.59 | | 14.25±4.17 | | 10.94±3.69 | | 90.38±10.70 | |
| Mission | | | | | | | | | | | | |
| Clinic nurse | 12.76±1.77 | | 20.06±4.24 | | 12.2±2.35 | | 14.13±3.71 | | 11.20±3.11 | | 86.09±12.38 | |
| Service responsible | 13.28±1.41 | 3.928 0.140 | 21.88±4.40 | 9.082 0.011 | 13.66±2.68 | 14.527 0.001 | 15.28±4.00 | 3.170 0.205 | 12.68±3.91 | 6.393 0.041 | 82.46±13.56 | 5.611 0.060 |
| Other | 12.72±1.97 | | 21.59±4.54 | | 12.56±2.27 | | 14.13±4.11 | | 11.13±3.79 | | 88.94±13.00 | |
| Year of operation | | | | | | | | | | | | |
| 1-5 years | 12.75±1.85 | | 19.62±4.4 | | 11.87±2.31 | | 14.38±3.95 | | 11.46±3.37 | | 84.19±12.63 | |
| 6-10 years | 12.65±1.75 | | 20.59±4.49 | | 12.84±2.6 | | 13.78±3.77 | | 10.98±2.85 | | 83.02±13.67 | |
| 11-15 years | 13.48±1.48 | 12.491 0.014 | 21.06±4.65 | 18.663 0.001 | 13.12±2.59 | 20.442 0.001 | 15.04±4.34 | 4.668 0.323 | 13.00±3.92 | 17.371 0.020 | 84.98±13.04 | 33.460 0.001 |
| 16-20 years | 12.93±1.91 | | 21.33±1.88 | | 13.27±1.6 | | 13.13±2.06 | | 11±2.73 | | 91.40±7.59 | |
| 21 years and over | 12.46±1.24 | | 22.63±3.9 | | 12.8±2.61 | | 14.74±3.2 | | 9.86±2.52 | | 95.34±7.85 | |
| Mode of operation | | | | | | | | | | | | |
| Continuous daytime | 12.95±1.55 | | 20.76±4.15 | | 12.77±2.41 | | 14.78±3.85 | | 11.84±3.78 | | 86.73±12.86 | |
| Continuous night | 12.8±1.63 | 1.115 0.573 | 20.53±6.31 | 0.430 0.807 | 13.2±3.59 | 8.286 0.016 | 12.87±2.87 | 6.438 0.040 | 11.53±3.10 | 2.260 0.323 | 84.27±17.98 | 0.480 0.780 |
| Shifts | 12.76±1.87 | | 20.27±4.09 | | 12.14±2.21 | | 14.23±3.85 | | 11.13±3.06 | | 85.53±11.63 | |

Kruskal-Wallis test, SCSS: Stress coping styles scale, SSE: Self-efficacy scale, X: Mean, SD: Standard deviation

surgical units-emergency service and surgical units-intensive care groups and that the mean total score of self-efficacy was lower in those working in surgical units (p<0.05). According to the working time, the difference between the mean total scores of self-efficacy was statistically significant (p<0.05); the difference was not statistically significant according to the duty and working time of the nurses (p>0.05).

Table 6 shows that all sub-dimensions of the self-efficacy scale ‘initiating, maintaining, completing and struggling with obstacles’ were positively correlated with ‘applying for social support and self-confident approach’, negatively correlated with ‘helpless approach and submissive approach’ and positively correlated with ‘optimistic approach’ in ‘initiating and maintaining behaviour’ (p<0.005).

Table 6. Relationship between nurses' SCSS and SSE sub-dimensions

| Scale/subdimension | Spearman's rho | SCSS | | | | |
|----------------------|----------------|-----------------------------|-------------------------|---------------------|-------------------|---------------------|
| | | Referring to social support | Self-confident approach | Optimistic approach | Helpless approach | Submissive approach |
| Behaviour initiation | r | .309 | .297 | 0.098 | -.402 | -.469 |
| | p | 0.001 | 0.001 | 0.068 | 0.001 | 0.001 |
| Sustaining behaviour | r | .256 | .404 | .142 | .524 | -.548 |
| | p | 0.001 | 0.001 | 0.008 | 0.001 | 0.001 |
| Completing behaviour | r | .327 | .524 | .281 | -.266 | -.312 |
| | p | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| Completing behaviour | r | .257 | .284 | .069 | -.310 | -.346 |
| | p | 0.001 | 0.001 | 0.200 | 0.001 | 0.001 |

p<0.01 Spearman correlation coefficient (r); r (p) is given as value in statistical analysis, SCSS: Stress coping styles scale, SSE: Self-efficacy scale

DISCUSSION

In the study, it was determined that nurses preferred the 'self-confident approach' and the 'submissive approach' as a coping style with stress, and there are similar studies in the literature showing that nurses mostly use the self-confident approach (Laçin 2018; Yılmaz Koçak & Büyükyılmaz 2019; Matud 2004; Şahin & Buzlu 2017; Jose & Bhat 2013; Yüksel & Özgür 2008; Çapık Durmaz & Öztürk 2017, Kelle Dikbaş & Özkanlı 2022). The fact that the nurses participating in the study used the 'self-confident approach', which is an active problem-based approach in coping with stress, the most, means that they are aware of the importance of the problem, consider and compare the solution alternatives, and make sense to change the problem programmatically and carefully as they progress towards the result of the solution. In addition, the fact that they actively and consciously make efforts, and the fact that they use the 'submissive' approach, which is one of the passive coping styles with stress, at the least shows that the individual feels helpless and does not seek solutions from unrealistic, supernatural forces and that the nurses participating in the study are successful in coping with stress. As a result of teaching problem-based approach styles to nurses in stressful situations during the training process, it is thought that the nurses participating in the study have learnt to cope with many stress factors both in their educational life and in their professional life as a result of determining the stressors in their work life, determining what kind of activities should be done to cope with stress, approaching stress safely and coping with stress by seeking social support.

The mean self-efficacy score of the nurses was 85.83 ± 12.68 and it was determined that the nurses generally had high self-efficacy beliefs and their self-efficacy of 'starting a behaviour' was higher and their self-efficacy of 'struggling with obstacles' was lower (Table 3). Similar to this study, there are studies in the literature that determined that nurses' self-efficacy to start behaviour is high (Türe & Akkoç 2019; Dikmen et al. 2016).

In the study, it was determined that male nurses mostly used 'self-confident and optimistic approach' and female nurses mostly used 'helpless approach' as coping style with stress (Table 4) ($p < 0.001$). Gender is an important variable in determining coping styles with stress in the literature, the findings obtained in the study are consistent with the findings of other studies in the literature, and it is found that women and men perceive stress experiences differently and use different coping styles to cope with stress, and in the research conducted by Matud (2004), it was found that women used emotionally oriented and avoidance coping to cope with stress (Matud 2004; Çapık Durmaz & Öztürk 2017). It is thought that women's use of passive methods such as 'helpless approach' in coping with stress is effective in women's bringing their emotions to the forefront.

In terms of coping with stress according to the age groups of the nurses participating in the study, it was determined that the nurses in the 20-24 age group used the 'self-confident approach' less than the other age groups, while the nurses aged 40 years and over used this approach more ($p < 0.001$). This result suggests that as individuals get older, they learn to use problem-based methods rather than emotion-based methods in coping with stress depending on their experience. In the study, it was determined that the self-efficacy of nurses aged 40 years and over was higher than other age groups.

Similarly, Sergek and Sertbaş (2006) determined that there was a statistically significant difference between self-efficacy and age in their study conducted with nurses and that self-efficacy increased as the average age increased (Sergek & Sertbaş 2010). In Bandura's social learning theory, he explained the development of individuals in the face of the difficulties they experience with the advancement of their age and the development of their self-efficacy beliefs (Bandura 1978; Bandura 1982). It is thought that nurses' experiences increase with age and their self-efficacy beliefs increase.

According to the marital status of the study participants, a difference was determined only in the 'safe approach' sub-dimension of coping with stress and it was seen that married individuals used the safe approach more than single individuals ($p < 0.001$). The marital responsibilities of married individuals suggest that they have gained experience in coping with stress and use the safe approach, which is an effective coping style in stressful situations. In terms of self-efficacy, it was determined that the self-efficacy belief of married nurses was higher than single nurses (Table 4). When examined in the literature, unlike this study, there are studies in which the self-efficacy of single individuals is higher (Çankaya & Çiftçi 2019; Ersarı et al. 2017). In the Turkish Cypriot Community, where the study was conducted, it is thought that married individuals have better self-efficacy beliefs, including issues such as decision-making, implementation and undertaking the consequences of any situation, due to reasons such as the advanced age of marriages and the high level of education of the society. In the study, according to the marital status of nurses, a difference was found only in the 'safe approach' sub-dimension in the style of coping with stress, and it was observed that married individuals used the safe approach more than singles ($p < 0.001$). It is thought that married individuals have gained experience in coping with stress with the responsibilities related to marriage they carry and that they are able to cope with stress.

According to the educational status of the nurses, it was founded that nurses who graduated from postgraduate programme used 'self-confident approach' and nurses who graduated from health vocational high school used 'optimistic and submissive approach' more. The use of 'submissive approach', which is a passive approach, as a coping style with stress by nurses who graduated from high school suggests that they accept stressful situations and are affected by stressors thinking that they cannot cope with stress, while those with postgraduate education level tend to use functional methods to cope with stress, suggesting the importance of education in coping with stress. The mean total score of the nurses' SCSS was higher in nurses with associate degree education level than in nurses with bachelor's degree education level and lower in nurses with postgraduate education level ($p < 0.05$). The fact that the self-efficacy of nurses with postgraduate education level is high suggests that education is successful in individuals' decision-making and taking responsibility.

According to the units in which the nurses participated in the study worked, it was observed that those working in intensive care applied to social support, those working in the operating theatre used an optimistic approach and those working in the emergency department used a submissive approach. It is stated in the literature that nurses working in the emergency department are exposed to multiple sources of stress due to the negative conditions created by the emergency department

environment such as physical conditions of the emergency department environment, inadequacy or lack of tools and equipment and consumables to be used, the number of patients coming to the emergency department is high, the number of nurses is insufficient, the workload is intense, and nurses have to do other jobs outside their professional duties and authorities (Özdaş & Kızıllıkaya 2021). Considering that this study was conducted during the COVID-19 pandemic period, it is thought that the nurses working in the emergency department are inadequate to cope with excessive stress due to the restrictive and negative conditions brought by the pandemic and the high patient density, and that the nurses working in this department use the 'submissive approach' style, which is a passive coping style with stress, as shown in the findings of the study. In terms of self-efficacy, it was determined that the self-efficacy belief of nurses working in the operating room was better than those working in internal units. Self-efficacy is the belief in an individual's abilities for the successful completion of a task (Bandura 1982). The operating theatre environment is one of the environments where it is important for the health team to make correct and fast decisions together, and the nurses here should be nurses who have high levels of knowledge, have the ability to make correct and fast decisions in abnormal situations, have a high belief in completing the task they have received professionally, and know how to successfully manage stress in stressful environments such as operating theatres, so it is thought that the self-efficacy of nurses working in the operating theatre is higher than other nurses.

Among the nurses who participated in the study, it was determined that ward charge nurses used 'secure approach, optimistic approach and submissive approach' as coping with stress more than those working in other positions. In this study, it is seen that charge nurses use both active and passive stress coping styles. In the study conducted by Türe & Akkoç (2019), it was determined that the duty of nurses did not affect the use of stress coping style. Considering that those who work as ward charge nurses are exposed to many stressors both as administrative and clinical nurses, although they exhibit a safe approach and optimistic approach to stressful situations, the fact that the working conditions in hospitals in the northern part of Cyprus are inadequate, the number of patients is high due to the small number of hospitals, etc. It suggests that charge nurses are exposed to more stressors and from time to time they are inadequate in coping and adopt a submissive approach.

According to the years of employment, it is seen that the nurses who have been working between 11-15 years use 'resorting to social support and submissive approach', the nurses who have been working between 16-20 years use 'optimistic approach', and the nurses who have been working 21 years or more use 'self-confident approach' more in coping with stress. It suggests that as the working time increases, nurses generally gain experience in the face of stressful situations and as a result, they prefer to use active coping styles. In support of this, the self-efficacy of nurses working 21 and more years was also found to be high and it is thought that the increase in self-efficacy positively affects the choice of coping style with stress. According to the working style, it was determined that continuous daytime workers used the 'helpless approach' and continuous nighttime workers used the 'optimistic approach' more. It is thought that daytime

workers in hospitals are helpless in the face of stress due to the high work intensity and stressful situations, while night workers are prepared for stressful situations and therefore, they are optimistic.

It was determined that as the use of all sub-dimensions of the self-efficacy scale increased in the nurses participating in the study, the use of 'resorting to social support and self-confident approach' as a coping style with stress increased and 'helpless approach and submissive approach' decreased ($p < 0.05$). In the literature, it is found that those with high self-efficacy have lower stress levels and use more active and problem-oriented coping strategies such as planning, seeking social support, reevaluating the stressful situation positively and producing active solutions in case of stress (Bodys Cupak et al. 2016). Problem-oriented coping styles in the face of stressful situations are that the individual is active towards the causes of stress and uses knowledge and logical analysis to cope with stress. The basis of problem-oriented stress coping styles is the direct focus of the individual on the source that causes stress, and in this approach, individuals reduce the negative impact of stress on the individual in similar situations by receiving advice and suggestions, developing new skills and making plans to cope with stress. The problem-solving ability of nurses is very important both in working in harmony with other members of the health team and in coping with negative situations such as stress. Self-efficacy affects self-control cognition and behaviour, including the way of approaching and coping with problems. Having the belief that he/she can fight with the stressor factor allows him/her to evaluate the situation within the framework of logic (Yılmaz et al. 2017; Khaleghi & Najafabadi 2015). In his study, Redhwan (2015) found that the individual's desire to resist against stressful events, believing in himself/herself and approaching the events within the framework of logic by developing autocontrol regarding the stressor factor increased the self-efficacy levels. The findings of the study are in line with the literature, and it is seen that nurses use more effective methods of coping with stress as their self-efficacy belief increases, based on the direct relationship between self-efficacy belief and problem-oriented coping (Bandura 1978; Bandura 1982). In order for nurses in the health system to develop functional coping styles in case of stress, it is thought that the use of problem-oriented active methods in coping with stress increases in nurses with high self-efficacy beliefs by strengthening self-efficacy in nursing education and working environment.

Limitations

The most important limitation of this study is that the questionnaire forms were applied online. The study is limited to nurses registered to the Turkish Cypriot Midwives and Nurses Association in the Turkish Republic of Northern Cyprus.

CONCLUSION

In the study, the self-efficacy level of nurses and the stress coping styles they use were explained. According to the findings, it was determined that nurses with high self-efficacy beliefs used problem-oriented active coping style in coping with stress. It is recommended to increase self-efficacy beliefs in nurses and to provide in-service training about problem-oriented active coping styles in coping with stress.

ETHICAL DECLARATIONS

Ethics Committee Approval

The study was carried out with the permission of the Ethics Committee of Cyprus Science University Graduate Training and Research Institute (Date: 29.06.2020, Decision No: 12).

Informed Consent

Written informed consent was obtained from all nurses included in the study.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

The authors declared that this study has received no financial support.

Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

Acknowledgments

We would like to thank our nurses for taking the time to fill out the Survey Form and their contributions to the statistical evaluation of the study. We would like to thank Dr. Zaliha Yarkiner.

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