



Examining the Solution-focused Thinking and Hope Levels of Turkish Midwifery Students During Distance Education: A Cross-sectional Study

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Abstract

Background: The uncertainty caused by the COVID-19 pandemic has adversely affected the physical and psychosocial health of each individual in the community. Although the psychosocial impact of COVID-19 has been studied in different populations, psychosocial factors (such as solution-focused thinking (SFT) and hope) have not been previously studied in midwifery students.

Objectives: This study aimed to determine the SFT and hope levels of midwifery students after distance education applied due to the COVID-19 pandemic.

Methods: This descriptive cross-sectional study was conducted in June 2020 in the Midwifery Department of the Health Sciences Faculty of Ondokuz Mayıs University, Turkey. The research data were collected using a student identification form (SIF), Solution-focused Inventory (SFI), and Dispositional Hope Scale (DHS). The data were analyzed using SPSS version 20. The compliance of the variables to normal distribution was evaluated using the Kolmogorov-Smirnov test. Mean, SD, number and percentage values, *t*-test, analysis of variance (ANOVA), and Pearson correlation were used in the analysis of the data. *P* values less than 0.05 were considered statistically significant.

Results: The average age of students was 20.78 ± 1.97 years. The SFI total score mean was 49.63 ± 5.72 , and the mean scores of the subdimension of problem disengagement, goal orientation, and resource activation were 12.97 ± 3.55 , 17.68 ± 3.17 , and 18.97 ± 3.25 , respectively. The mean total score for DHS was 48.53 ± 7.18 , and the mean scores of the alternative ways thought and acting thinking subdimensions were 24.75 ± 3.86 and 23.78 ± 3.99 , respectively. A high level of positive correlation was found between SFI and DHS ($r = 0.432$; $P < 0.001$).

Conclusions: Students who have higher SFT have higher levels of hope. For this reason, as future health professionals, an SFT approach that allows midwifery students to cope with mental disorders to serve in extraordinary situations should be added to educational curricula (such as the solution-focused midwifery course).

Keywords: Solution-focused Thinking, Hope, Midwifery, Students.

1. Background

COVID-19 (first appeared in China in December 2019) spread worldwide in a very short time and was declared a global pandemic by the World Health Organization (WHO) in March 2020 (1). Pandemics occur due to epidemics. A pandemic is defined as “an epidemic that occurs worldwide or in a very wide area, transcends international borders, and generally affects a large number of people” (2). The pandemic adversely affects the holistic health, well-being, and psychosocial health of each individual in the community (3, 4).

The COVID-19 pandemic affected higher education

across the world. Universities have started to alter their face-to-face courses with distance learning. In this regard, the most important problems faced by students are access to distance education materials (internet, computer, tablet, smartphone, etc.) and problems related to their use (5, 6).

In addition, students started to experience stress, fear, and anxiety due to the measures taken against the epidemic, changes in habits, and social isolation (5). The difficulties faced by students due to the COVID-19 pandemic are the difficulties experienced in web-based online classes from the classrooms where they are trained face-to-face, uncertainties about how to measure and evaluate

the success of each course (exams), learning problems due to stress for both themselves and their families, mental health deterioration due to negative effects on psychological health, etc. (7). Especially in this process, the departments that provide practical training have experienced important problems regarding how to implement different professional practices.

One of the departments that carry out applied education in universities, especially in health institutions, is the midwifery department. With the pandemic, education in midwifery departments in faculties or colleges started to be carried out by distance education. In addition to the difficulties experienced by midwifery students regarding their participation in theoretical courses, conducting professional-practice courses (which they can experiment with and apply in health institutions, such as the hospital environment) with distance education administration may increase their anxiety, uncertainty, and their perception of hopelessness about the future.

Hope is a future-focused type of thinking. According to Snyder (8), hope is a 2-factor process of thinking as determining the goal and planning the ways to reach the goal. Emotions reflect the perceived level of hope; therefore, people with high levels of hope are more positive, happier, more optimistic, and better able to cope with their problems when they achieve their goals. During the pandemic, hope affects subjective happiness both directly and indirectly in dealing with the fear of COVID-19 (9). Solution-focused thinking (SFT) skill is a predictive factor in looking to the future with hope.

The SFT approach focuses on revealing the self-resources of individuals who aim for the future when there is no problem and that individuals do not realize to achieve this goal. Solution-focused thinking, instead of thinking about the facts that occurred in the past and caused the problem, ensures that the solution will be reached now and in the future (10). According to this approach, there is no cause-and-effect relationship between the problem and the solution. Knowing the causes of the problems does not help to construct solutions (11). Therefore, SFT offers individuals the opportunity to think about solutions instead of problems (12). It is important to use a solution-focused consultancy approach in providing students with SFT skills. It has been found that solution-focused group counseling applied to midwifery students is effective in improving the mental health of students (13).

Few studies have been found to determine the SFT disposition and/or hope levels of students in our country. According to a study conducted with students from the faculty of education, the SFT skills of female students were at a higher level (14). Bilgiç et al. (15) found that nursing stu-

dents and Duman et al. (16) found that university students have high levels of hope.

Solution-focused thinking during the pandemic period can enable students to produce solutions by focusing on the future instead of thinking about their current problems (17), and this can positively affect the hope levels of students (18). In the COVID-19 pandemic, hope is an important emotion that also affects psychological well-being (19).

2. Objectives

In a comprehensive literature review, no study was found to determine the SFT and hope levels of midwifery students neither before the pandemic nor during the pandemic period. Determining the SFT and hope levels of students during the pandemic period and their relationship with each other can significantly contribute to the midwifery undergraduate education carried out with distance education.

3. Methods

3.1. Study Design and Participants

This descriptive cross-sectional research was conducted in the Midwifery Department of the Health Sciences Faculty of Ondokuz Mayıs University, Turkey. The study population consisted of 288 students (first, second, third, and fourth grade) studying in the midwifery department. No sample selection was made, and all of the midwifery department students were aimed to be reached. The study sample included 238 (82.6% of the population) midwifery department students who volunteered to participate in the study.

3.2. Instruments

3.2.1. Student Identification Form

The student identification form (SIF) consists of 9 questions to determine some demographic characteristics such as sex, age, educational information, etc.

3.2.2. Solution-focused Inventory

Solution-focused Inventory (SFI) was developed by Grant et al. to measure whether the individual shows a tendency toward SFT (12); in Turkey, its validity and reliability were confirmed by Şanal Karahan and Hamarta in 2015 (10). The scale consists of 12 items and 3 subdimensions in total. The total score that can be obtained from the scale varies between 6 and 72, and the score that can be obtained from the subdimensions varies between 4 and

24. High scores indicate high SFT. The Cronbach α internal consistency reliability of the scale was 0.77 for the separation from the problem subdimension, 0.84 for the goal orientation subdimension, and 0.70 for the resource mobilization subdimension (10). In this study, Cronbach α internal consistency reliability was 0.59 for separating from the problem subdimension, 0.80 for the goal orientation subdimension, and 0.73 for the activating resources subdimension.

3.2.3. Dispositional Hope Scale

The Dispositional Hope Scale (DHS) was developed by Snyder et al. to determine the sustained hope levels of individuals over the age of 15 (20). In Turkey, its validity and reliability were confirmed by Tarhan and Bacanlı (21). It consists of 12 items and 2 subdimensions. The total scores that can be obtained from the scale range from 8 to 64, and the score that can be obtained from the subdimensions varies between 4 and 32. As the scores obtained from this scale increase, the dispositional hope levels of individuals increase. The Cronbach α internal consistency reliability of the scale was 0.81 for the alternative paths thought subdimension, 0.78 for the agent thought subdimension, and 0.86 for the whole DHS (21). In this study, the Cronbach α internal consistency reliability of the scale was 0.80 for the alternative paths thought subdimension, 0.80 for the agent thinking subdimension, and 0.87 for the whole DHS.

3.3. Procedure

Due to the pandemic, the data collection tools were used online using Google Forms. The data were collected between 15.06.2020 and 30.06.2020. Before starting the research, written permission was obtained from the Social and Humanities Ethics Committee (decision No: 2020/312). The students who volunteered to participate in the study were informed about the purpose and content of the research, that any information obtained would remain confidential, that the data would be used within the scope of scientific research, and that their consent was obtained with an online consent form.

3.4. Data Analysis

The compliance of the variables to normal distribution was evaluated using the Kolmogorov-Smirnov test. Mean, SD, number and percentage values, *t*-test, analysis of variance (ANOVA), and Pearson correlation were used in the analysis of the data. *P* values less than 0.05 were considered statistically significant.

4. Results

Only female students were included in this study. The average age of the students was 20.78 ± 1.97 years (minimum, 18; maximum, 34). As shown in Table 1, 71% of midwifery students live in nuclear families, and 64.7% stated that the income of the family is equal to the expenses. The total score average of the students in SFI was 49.63 ± 5.72 , and the mean scores of the subdimensions of problem disengagement, goal orientation, and resource activation were 12.97 ± 3.55 , 17.68 ± 3.17 , and 18.97 ± 3.25 , respectively. The total score average of the students in DHS was 48.53 ± 7.18 , and the mean scores of the alternative ways thought and acting thinking subdimensions were 24.75 ± 3.86 and 23.78 ± 3.99 , respectively (Table 2). There was no statistically significant difference between the demographic characteristics of the students and their mean scores for SFI and DHS ($P > 0.05$; Table 3). There was a strong and positive correlation between the SFI total score average and DHS total score average ($P < 0.001$). At the same time, there was a strong and positive correlation between the mean score of all subdimensions of SFI and the mean score of all subdimensions of DHS ($P < 0.001$; Table 4).

5. Discussion

This study aimed to evaluate the SFT skills and hope levels of midwifery students during the pandemic. According to our findings, the SFT skills of midwifery students were medium (49.63 ± 5.72), and their hope levels were high (48.53 ± 7.18).

In a study conducted with pre-pandemic education faculty students in Turkey, the SFT skills of students were at a medium level (SHI, 50.3 ± 7.71) (14), which is similar to the result of this study (49.63 ± 5.72). Unlike other university students, midwifery students receive practical training, including clinical practice (based on skills) and theoretical training (22, 23). During the pandemic, health institutions in some parts of the world did not admit students to clinics due to the increasing number of patients and the lack of personal protective equipment (24, 25).

As in other countries, hospitals in Turkey did not admit students to clinical education. To be graduates of midwifery students in Turkey was expected to complete some competencies covering pregnancy, childbirth, and the postpartum period. These competencies included 100 pre-natal examinations, attending at least 40 deliveries, caring for 40 women at risk in pregnancy, labor, or post-natal period, and caring for at least 100 postnatal women and healthy newborns (26). In addition, during the pandemic, both theoretical and applied courses were conducted only through distance education, and uncertain-

Table 1. Distribution of Some Demographic Characteristics of Midwifery Students^a

Attributes	No. (%)
Term	
First-grade	68 (28.6)
Second-grade	61 (25.6)
Third-grade	52 (21.8)
Fourth-grade	57 (23.9)
Family structure	
Nuclear family	169 (71.0)
Extended family	54 (22.7)
Broken family	15 (6.3)
Family income status	
Income less than expenses	68 (28.6)
Income equal to expenses	154 (64.7)
Income more than expenses	16 (6.7)
Midwifery department preference status	
Willingly	169 (71.0)
Unwillingly	69 (29.0)
Place to stay before the pandemic	
With the family	105 (44.1)
With her housemate	12 (5.0)
In dormitories	121 (50.8)
Where she lives during the pandemic	
Province	108 (45.4)
District	86 (36.1)
Village	44 (18.5)

^a N = 238; Participants were, on average, 20.78 years old (SD = 1.97).

Table 2. Midwifery Students' Solution-focused Inventory and Dispositional Hope Scale Score Averages

Scales and Subdimensions	$\bar{X} \pm SD$
SFI	
Problem disengagement	12.97 ± 3.55
Goal orientation	17.68 ± 3.17
Resource activation	18.97 ± 3.25
Total SFI	49.63 ± 5.72
DHS	
Alternative ways	24.75 ± 3.86
Acting thinking	23.78 ± 3.99
Total DHS	48.53 ± 7.18

Abbreviations: SFI, Solution-focused Inventory; DHS, Dispositional Hope Scale

Table 3. Distribution of Solution-focused Inventory and Dispositional Hope Scale Score Averages According to Some Demographic Characteristics of Midwifery Students ^a

Variable	SFI	DHS
Term	F = 5.937; P = 0.115	F = 5.369; P = 0.147
First-grade	51.08 ± 4.94	49.80 ± 6.32
Second-grade	48.95 ± 5.94	48.01 ± 6.74
Third-grade	49.28 ± 4.24	46.96 ± 8.29
Fourth-grade	48.94 ± 7.34	49.01 ± 7.39
Family structure	F = 4.001; P = 0.135	F = 1.216; P = 0.544
Nuclear family	49.87 ± 5.80	48.86 ± 7.41
Extended family	48.48 ± 5.86	48.03 ± 6.11
Broken family	51.06 ± 4.68	46.60 ± 8.18
Family income status	F = 0.081; P = 0.960	F = 0.562; P = 0.755
Income less than expenses	49.05 ± 7.63	48.26 ± 7.91
Income equal to expenses	49.82 ± 4.97	48.55 ± 6.50
Income more than expenses	50.25 ± 3.49	49.50 ± 10.17
Midwifery department preference status	t = 5.029; P = 0.096	t = 5.161; P = 0.165
Willingly	49.98 ± 5.71	48.86 ± 6.94
Unwillingly	48.75 ± 5.87	47.73 ± 7.74
Place to stay before the pandemic	F = 1.386; P = 0.500	F = 2.735; P = 0.255
With the family	50.22 ± 5.36	49.22 ± 6.38
With her housemate	46.41 ± 11.74	49.50 ± 8.06
In dormitories	49.43 ± 5.19	47.84 ± 5.77
Where she lives during the pandemic	F = 0.504; P = 0.777	F = 6.899; P = 0.032
Province	49.75 ± 5.97	49.16 ± 7.61
District	49.36 ± 5.82	47.01 ± 6.84
Village	49.86 ± 5.27	49.97 ± 6.34

Abbreviations: SFI, Solution-focused Inventory; DHS, Dispositional Hope Scale

^a Values are expressed as $\bar{X} \pm SD$.

ties regarding graduation were experienced. According to Kürtüncü and Kurt (27), the “problems in the distance education infrastructure of the university” experienced by nursing students in distance education are as follows: “Not facing education,” “limitation of possibilities,” “mood caused by the pandemic,” and “test anxiety.” In the study conducted by Rajab et al. (28) to determine the distress experienced by medical students during the pandemic, it was determined that anxiety related to the epidemic, lack of motivation, stress, and time management were among the difficulties experienced by students in distance education. It was thought that all these possible problems and situations might negatively affect the SFT skills of the midwifery department students, but the results showed that the SFT skills of the students were not significantly affected by these possible problems ($P > 0.05$). According to this

result, it can be said that the midwifery department students’ SFT skills are above the middle level, and they think solution-focused in extraordinary situations.

Similar to the result of this study, it was found that in Turkey, nursing students in the study by Bilgiç et al. (15) before the pandemic and university students in the study by Duman et al. (16) had high levels of hope. In addition, the hope levels of sports science students before the pandemic were found to be moderate (29). In Turkey, there is a summer internship in the curriculum of midwifery departments. Midwifery students complete graduation requirements (100 prenatal examinations, attending at least 40 deliveries, 100 postnatal examinations etc.) during the summer internship. Due to the pandemic, students could not do their summer internships in Turkey and, in the world, could not be accepted to health institutions.

Table 4. The Relationship Between the Total Score Averages of Students on the Solution-focused Inventory, Dispositional Hope Scale, and Subdimension Score Averages

SFI and Subdimensions	DHS and Subdimensions		
	Alternative Ways	Acting Thinking	DHS Total
Goal orientation			
r	0.568	0.564	0.613
P	0.001	0.001	0.001
Resource activation			
r	0.632	0.402	0.552
P	0.001	0.001	0.001
Problem disengagement			
r	0.340	0.280	0.336
P	0.001	0.001	0.001
SFI Total			
r	0.451	0.355	0.432
P	0.001	0.001	0.001

Abbreviations: SFI, Solution-focused Inventory; DHS, Dispositional Hope Scale

Despite the uncertainties regarding these situations and the thought that the necessary competencies could not be completed, it was a very striking result that the students' level of hope was high. It can be thought that students of the midwifery department maintain their hopes even in troubled times.

According to the findings, students', grade degree, family type, family income, the status of choosing the midwifery department, the place where students stay before the pandemic, and the place they lived during the pandemic do not statistically significantly affect their SFT skills and hope levels found ($P > 0.05$). It was found that students with problem-solving skills in Iran experience less stress (30). In another study, a strong negative relationship was found between the hope level and perceived stress, and it was determined that individuals with high hope levels perceive their stress levels as lower (31).

In the present study, there is no significant difference between students' grade degrees and SFT skills and hope levels ($P > 0.05$). But it was observed that both SFT skills and hope levels of the first-grade students were higher than those in other classes. First-grade students were with their families again before adapting to university life, living alone, and without encountering stressors such as economic responsibility for a long time. The fact that these students only experienced formal education in the first grade and were with their families for distance education at the beginning of the other period due to the pandemic may have affected this result. The fact that those who stay with their families in the pre-pandemic period have higher SFT skills compared to those who stay with their room-

mates or in dormitories also supports this idea.

The place where midwifery students lived during the pandemic did not affect their SFT skills and hope levels ($P > 0.05$). However, when the findings were examined, it was found that both the SFI and the DHS scores of the students living in the village were higher than the students living in the provinces and districts. Since the beginning of the pandemic in Turkey, the number of cases first started to increase rapidly in metropolitan cities. Later, on April 10, 2020, the curfew restrictions covering the weekends were started by the Ministry of Interior, and then travel restrictions were imposed on metropolitan cities. The low number of cases in villages and the absence of restrictions may have positively affected the SFT skills and hope levels of the students living there.

It was determined that the income level of their families did not affect the SFT skills and hope levels of the students ($P > 0.05$), but the students who stated that their family income was higher than the expenses were found to have higher SFT skills and hope levels compared to the other groups. Similar to this study, Ozmen et al. (32) showed that hope increases as the economic situation increases. However, the low number of students who stated that their family income was higher than their expenses might affect this result.

A strong and positive correlation was found between the mean score of the total and subdimensions of SFI of all the students participating in the study, as well as the mean scores of the total and subdimensions of DHS ($P < 0.001$). As the SFT skills of the students studying in the midwifery department increased, their hope levels also in-

creased. No study investigating the relationship between SFT and hope could be found in the literature. However, there are studies investigating the predictors of SFT and hope levels. In a study conducted with adolescents, a significant negative relationship was found between SFT and hopelessness, and it was found that as adolescents' tendency to think solution-focused increased, their feelings of hopelessness decreased (33). Hope is a future-focused type of thinking (8).

Solution-focused thinking skill is a thinking process that enables the determination of future goals, mobilization of the strengths and resources of the individual who will work in reaching the goal, and the individual frees him/her from the problem externally and directs him to his goals (12). This process explains the relationship between SFT skill and hope. Also, in other studies, a significant relationship was detected between hope and problem-solving skills (34) and psychological resilience (29), as well as between SFT and empathy (14) and happiness (33).

5.1. Conclusions

During distance education, the SFT skills of the students were above the medium level, and their hope level was high. In this period, there was a strong relationship between the SFT skills of the students and hope levels. Students with high SFT skills also had a higher sense of hope for the future. Midwives had great responsibilities in protecting, strengthening, and improving public health both in pandemic periods and in out-of-pandemic situations. For this reason, raising the SFT and hope levels of students who are future midwives is of great importance for pandemic and/or non-pandemic conditions. As future health professionals, an SFT approach that allows midwifery students to cope with mental disorders to serve in extraordinary situations should be added to educational curricula (such as solution-focused midwifery courses).

5.2. Limitations

This study was limited to the relevant sample due to geographical and social differences and cannot be generalized to other groups.

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Footnotes

Authors' Contribution: Study concept and design: N. K. and H. G.; analysis and interpretation of data: N. K.; drafting of the manuscript: N. K.; critical revision of the manuscript for important intellectual content: N. K. and H. G.; statistical analysis: N. K.; Study supervision: N. K. and H. G.

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References

- Liu X, Na RS, Bi ZQ. [Challenges to prevent and control the outbreak of COVID-19]. *Zhonghua Liu Xing Bing Xue Za Zhi*. 2020;**41**(7):994-7. Chinese. [PubMed ID: 32220275]. <https://doi.org/10.3760/cma.j.cn112338-20200216-00108>.
- Kelly H. The classical definition of a pandemic is not elusive. *Bull World Health Organ*. 2011;**89**(7):540-1. [PubMed ID: 21734771]. [PubMed Central ID: PMC3127276]. <https://doi.org/10.2471/BLT.11.088815>.
- Saha K, Torous J, Caine ED, De Choudhury M. Psychosocial Effects of the COVID-19 Pandemic: Large-scale Quasi-Experimental Study on Social Media. *J Med Internet Res*. 2020;**22**(11). e22600. [PubMed ID: 33156805]. [PubMed Central ID: PMC7690250]. <https://doi.org/10.2196/22600>.
- Saladino V, Algeri D, Auriemma V. The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being. *Front Psychol*. 2020;**11**:577684. [PubMed ID: 33132986]. [PubMed Central ID: PMC7561673]. <https://doi.org/10.3389/fpsyg.2020.577684>.
- Aristovnik A, Keržič D, Ravšelj D, Tomaževič N, Umek L. Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. *Sustainability*. 2020;**12**(20). <https://doi.org/10.3390/su12208438>.
- Keskin M, Özer Kaya D. Evaluation of students' feedbacks on web-based distance education in the COVID-19 process. *Izmir Kâtip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*. 2020;**5**(2):59-67.
- Sahu P. Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus*. 2020;**12**(4). e7541. [PubMed ID: 32377489]. [PubMed Central ID: PMC7198094]. <https://doi.org/10.7759/cureus.7541>.
- Snyder CR. Conceptualizing, Measuring, and Nurturing Hope. *J Couns Dev*. 1995;**73**(3):355-60. <https://doi.org/10.1002/j.1556-6676.1995.tb01764.x>.
- Satici SA, Kayis AR, Satici B, Griffiths MD, Can G. Resilience, Hope, and Subjective Happiness Among the Turkish Population: Fear of COVID-19 as a Mediator. *Int J Ment Health Addict*. 2020:1-16. [PubMed ID: 33293904]. [PubMed Central ID: PMC7714252]. <https://doi.org/10.1007/s11469-020-00443-5>.
- Şanal Karahan F, Hamarta E. Çözüm Odaklı Envanter: Güvenirlilik Ve Geçerlilik Çalışması. *İlköğretim Online*. 2015;**14**(2). <https://doi.org/10.17051/10.2015.15313>.

11. Neipp MC, Beyebach M, Nunez RM, Martinez-Gonzalez MC. The Effect of Solution-Focused Versus Problem-Focused Questions: A Replication. *J Marital Fam Ther.* 2016;**42**(3):525-35. [PubMed ID: 26387987]. <https://doi.org/10.1111/jmft.12140>.
12. Grant AM, Cavanagh MJ, Kleitman S, Spence G, Lakota M, Yu N. Development and validation of the solution-focused inventory. *J Posit Psychol.* 2012;**7**(4):334-48. <https://doi.org/10.1080/17439760.2012.697184>.
13. Javid N, Ahmadi A, Mirzaei M, Atghaei M. Effectiveness of Solution-Focused Group Counseling on the Mental Health of Midwifery Students. *Rev Bras Ginecol Obstet.* 2019;**41**(8):500-7. [PubMed ID: 31450257]. <https://doi.org/10.1055/s-0039-1693741>.
14. Karahan FŞ, Bakalım O, Yoleri S. Solution focused thinking in education faculty students<p>Eğitim fakültesi öğrencilerinde çözüm odaklı düşünme ve empati. *Journal of Human Sciences.* 2017;**14**(4). <https://doi.org/10.14687/jhs.v14i4.5024>.
15. Bilgiç Ş, Temel M, Çelikalp Ü. Assessment of Learned Resourcefulness, Self-Efficacy and Hope Levels of Nursing Students: A Case Study Tekirdağ. *Sağlık ve Hemşirelik Yönetimi Dergisi.* 2017. <https://doi.org/10.5222/shyd.2017.117>.
16. Duman N, İMre Y, Misirli M. [A Research on the Hopelessness Level and Cognitive Distortions of University Students]. *R&S - Research Studies Anatolia Journal.* 2019:207-13. Turkish. <https://doi.org/10.33723/rs.543715>.
17. Cakir Y. [Investigation of the Covid-19 Process in Terms of Solution Oriented Therapy]. *Anadolu Academy Journal of Social Sciences.* 2020;**2**(2). Turkish.
18. ZubaroĞLu YanardaĞ M, Özmete E. [The Effect of Solution Focused Social Work Intervention on College Students' Hopelessness and Stress Levels]. *Mehmet Akif Ersoy univ iktis idari bilim fak derg.* 2020;**7**(1). Turkish. <https://doi.org/10.30798/makuiibf.568273>.
19. Counted V, Pargament KI, Bechara AO, Joynt S, Cowden RG. Hope and well-being in vulnerable contexts during the COVID-19 pandemic: does religious coping matter? *J Posit Psychol.* 2020;**17**(1):70-81. <https://doi.org/10.1080/17439760.2020.1832247>.
20. Snyder CR, Harris C, Anderson JR, Holleran SA, Irving LM, Sigmon ST, et al. The will and the ways: development and validation of an individual-differences measure of hope. *J Pers Soc Psychol.* 1991;**60**(4):570-85. [PubMed ID: 2037968]. <https://doi.org/10.1037//0022-3514.60.4.570>.
21. Tarhan S, Bacanlı H. Adaptation of dispositional hope scale into Turkish: Validity and reliability study. *The Journal of Happiness & Well-Being.* 2015;**3**(1):1-14.
22. Yücel U, Ekşioğlu A, Demirelöz M, Akmeşe ZB, Koçak YÇ, Soğukpınar N. [Profile analysis of post graduate education of midwifery in Turkey]. *Int J Human Sci.* 2013;**10**(1):1342-54. Turkish.
23. Yılmaz T, Karanisoglu H. Current situation of midwifery education in Turkey. *Journal of Health Sciences and Professions.* 2016;**3**(1):73-7.
24. Lazenby M, Chambers S, Chyun D, Davidson P, Dithole K, Norman I, et al. Clinical nursing and midwifery education in the pandemic age. *Int Nurs Rev.* 2020;**67**(3):323-5. [PubMed ID: 32578218]. [PubMed Central ID: PMC7361742]. <https://doi.org/10.1111/inr.12601>.
25. Luyben A, Fleming V, Vermeulen J. Midwifery education in COVID-19-time: Challenges and opportunities. *Midwifery.* 2020;**89**:102776. [PubMed ID: 32526596]. [PubMed Central ID: PMC7263260]. <https://doi.org/10.1016/j.midw.2020.102776>.
26. Midwifery National Core Education Program. [National Core Education Curriculum for Postgraduate Midwifery]. Ankara, Turkey: Midwifery National Core Education Program; 2016. Turkish.
27. Kürtüncü M, Kurt A. Problems of nursing students in distance education in the COVID-19 pandemic period. *Eurasian Journal of Researches in Social and Economics.* 2020;**7**(5):66-77.
28. Rajab MH, Gazal AM, Alkattan K. Challenges to Online Medical Education During the COVID-19 Pandemic. *Cureus.* 2020;**12**(7). e8966. [PubMed ID: 32766008]. [PubMed Central ID: PMC7398724]. <https://doi.org/10.7759/cureus.8966>.
29. Tolga O, Caz C, Fatih R. The Relationship between Resilience and Constant Hope in Students Studying Sports Science. *Eur J Educ Res.* 2018;**7**(3):583-9. <https://doi.org/10.12973/eu-jer.7.3.583>.
30. Shahbazi S, Heydari M, Shaykhi RA. [The effect of problem solving course on student's stress intolerance]. *Journal of Shahrekord Uuniversity of Medical Sciences.* 2011;**13**. Persian.
31. Sucan S. The Relationship between Hope and Perceived Stress in Teacher Candidates. *Int J High Educ.* 2019;**8**(2). <https://doi.org/10.5430/ijhe.v8n2p1>.
32. Ozmen D, Dundar PE, Cetinkaya AC, Taskin O, Ozmen E. [Hopelessness and factors affecting hopelessness in high school students]. *Anatolian Journal of Psychiatry.* 2008;**9**(1):8-15. Turkish.
33. Koca O. The Relationship between Solution Focused Thinking, Emotion Regulation, Hopelessness and Happiness Level in Adolescents, According to the State of Belief that School Success Carries the Future Goals. *Rev Argentina de Clin Psicol.* 2020;**29**(5):1864-74.
34. Atik G, Erkan Atik Z. Predicting Hope Levels of High School Students: The Role of Academic Self-Efficacy and Problem Solving. *Ted Eğitim Ve Bİllim.* 2017. <https://doi.org/10.15390/eb.2017.5348>.