Intern Healthcare Students’ Correlation Between Their Career Adaptability and Ability to Manage Emotions During the COVID-19 Pandemic

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Research Article

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Abstract

Background: The study was conducted to determine the correlate between intern nursing, midwifery, physiotherapy and rehabilitation, and social work healthcare students’ career adaptability and their ability to manage emotions during the Covid-19 pandemic.

Methods: The sample of this correlational design study consisted of 219 students (nurse, midwifery, social work and physiotherapy and rehabilitation) studying at the Faculty of Health Sciences Undergraduate Program of a University in the fall semester of the 2020-2021 academic year. The study data were collected using the Personal Information Form, Career Adapt-Ability Scale (CAAS) and Courtauld Emotion Control Scale (CECS). The data obtained were analyzed by using the independent samples t-test, ANOVA and correlation tests. The variables included in the regression models were those reporting correlations and those the literature showed as relevant in the analysis.

Results: In the study, the participants were determined to tend to suppress and avoid expressing their emotions. Two models contribute to the explained variance of CAAS and CECS regarding COVID-19 with over 50%, and career planning regarding during COVID-19 was explained by 5.1%.

Conclusion: The results suggest that male students and social work students should be encouraged during their university education that they could find a job after graduation. It is recommended that students’ hope should be enhanced and the topic emotional control should be included in education programs.

Introduction

The SARS-CoV-2 infection has turned into an epidemic of unpredictable dimensions due to the lack of information about the rate of spread, the mechanisms of infection and survival, and the lack of global habits related to social distancing. Since the first case was confirmed in March 2020 and the first death from COVID-19 was documented, the general Turkish population has started to fear this infection [1]. The COVID-19 epidemic revealed potential problems in health care also in mental health. Especially healthcare workers, due to their responsibility to combat the epidemic, are more exposed to contact with infected persons and therefore have a significant mental burden. The growing psychological problems of healthcare workers, concern increased levels of anxiety, depression, insomnia, chronic fatigue, and stress [1].

Given the innovation of COVID-19 and the scant information the world still has about its spread, control and treatment, healthcare students in general have cases of fear and stress associated with COVID-19 [2]. With respect to students from health sciences, adequate knowledge was reported by 85%, prevention behaviors by 94%, and a perception of moderate risk [3]. Together with the concerns and uncertainty of the disease, presence of anxiety and fear of contracting COVID-19, epidemiological change still not under control, nursing students have equal concerns on the ambiguity regarding these new roles that can limit the learning opportunities, given the need to consolidate the abilities and skills necessary to permit a
transition [4]. With the spread of the COVID-19 pandemic in Turkey and all over the world since March 2020, all level trainings have been carried out remotely in our country.

Not only should we focus on the negative aspects of the pandemic period we live in, but also we should take the opportunities it brings about into account. In this period which is the beginning of changes, the ability to adapt to changes is very important. We can think of this process as a period in which we mostly stay home, where we have the opportunity to find inner exploration, creativity, self-observation and to spend more time with the family [1–4].

Diversification of the education-teaching methods in schools by considering the negative effects caused by the pandemic affects students’ emotions and their adaptation to their working life. Uncertainties about when life will return to “normal” increase students' anxiety. Although institutions make changes in the provision of education and training in different ways, the highest priority should be given to the ensuring of trust in students through active communication [5]. Determination of the emotions which are expressed in a healthy way, control of the emotions by nursing, midwifery, physiotherapy and rehabilitation and social work students who are the prospective health professionals to provide health work to the society, and the influencing factors are thought to be important, because all these will affect students’ career plans [6, 7].

**Aim**

The study was conducted to determine the correlate between intern nursing, midwifery, physiotherapy and rehabilitation, and social work healthcare students’ career adaptability and their ability to manage emotions during the Covid-19 pandemic.

**Methods**

**Design**

This was a correlational, predictive, cross-sectional study conducted to determine the correlation between intern nursing, midwifery, physiotherapy and rehabilitation and social work healthcare students' career adaptability and their emotion management ability.

**Sample**

The study was conducted in Faculty of Health Sciences between October 2020 and December 2020. The population of the study informed consisted of 4th grade intern students attending the Nursing, Midwifery, Physiotherapy and Rehabilitation, Social Work departments of Faculty of Health Sciences (N = 480). The minimum sample size of the study was calculated as 213 students using the Epi Info statistical package program (5% margin of error, 95% confidence interval and a design effect of 1.0). However, 219 students were included in the study considering the possibility of losses during the study.
Data Collection

The Personal Information Form, Career Adapt-Ability Scale and Courtauld Emotion Control Scale were used to collect the study data.

Personal Information Form: The form consists of items questioning the participants’ sociodemographic characteristics, emotions, and career plans.

Career Adapt-Ability Scale (CAAS): The Career Adapt-Ability Scale developed by Savickas and Porfeli (2012) was used to assess the level of career adaptability. The CAAS adapted to Turkish by Kanten (2012) consists of 19 items and 4 subscales: concern, control, curiosity, and confidence. As the score obtained from the scale increases so does the participant’s career adaptability [8,9].

Courtauld Emotional Control Scale (CECS): The CECS developed by Watson and Greer was adapted to Turkish by Okyavuz [10,11]. The Cronbach's alpha coefficient of the Turkish version of the overall CECS was 0.87 [11]. The CECS is a self-assessment scale. It consists of three subscales: "Anger Control", "Anxiety Control" and "Unhappiness Control", each of which contains 7 items. The mean scores to be obtained from the scale are calculated separately for the three subscales. The sum of these three mean scores yields the mean score for the overall scale. The higher the score obtained from the scale is the more the person suppresses his or her emotions consciously and hesitates to express his or her feelings [11].

Implementation of the Study

After the participating students were explained about the purpose and process of the study and the questionnaire via the online link prepared for the study, and told that participation in the study was voluntary, their consent was obtained.

Data availability

The datasets used and/or analyses during the current study available from the corresponding author on reasonable request.

Data Analysis

The SPSS for Windows 21.0 (Statistical Package for Social Sciences for Windows) program was used to analyze the study data. Numbers, percentages, arithmetic mean, standard error, minimum and maximum values were used for the analysis of the descriptive data. The relationship between different independent groups was analyzed by using the independent samples t-test, ANOVA and correlation tests. For the significance level of the statistical tests, p<0.05 was used. The variables included in the regression models were those reporting correlations and those the literature showed as relevant in the analysis.

Ethical considerations
To conduct the study and to collect the data, permissions were obtained from Manisa Celal Bayar University Faculty of Health Sciences (October 13, 2020-E.80433, 20478486-566-) and the Ethics Committee of Manisa Celal Bayar University Medicine Dean of Health Sciences (October 20, 2020-E.80433, 20478486-566-). Written informed consent was obtained from all the participants. The study was carried out in accordance with the ethical standards established in the Declaration of Helsinki.

Results

Descriptive data

The mean age of the participating students was 21.88 ± 1.14 (min: 20, max: 30) years.

Of them, 60.0% were 22 years and older, 88.6% were women, 37.0% were students in nursing, 21.0% were students in midwifery, 29.2% were students in physiotherapy and rehabilitation and 16.5% were students in social work, 98.2% were single, 59.4% stated that their income was equal to their expenses. As for the parents’ parenting attitudes, 52.5% displayed a protective parenting attitude, 23.3% displayed a democratic attitude, 14.2% displayed an authoritarian attitude, 6.8% displayed an inconsistent attitude, and 3.2% displayed an indifferent attitude. As for the fathers’ education level, 53.9% were primary school graduates, 26.9% were high school graduates. As for the mothers’ education level, 60.7% were primary school graduates and 19.2% were high school graduates. While 64.4% of the students expected that the future would be better than today, 18.7% stated that it would be worse than today.

According to the participating students’ statements, 75.8% had good social relationships and 17.8% had very good social relationships, 44.1% wanted to work in the public sector, 26.7% wanted to have postgraduate education, 16.1% wanted to work in the private sector, and 11.1% planned to start their own business.

While 54.3% of the participating students answered the question, “Would you be willing to care for patients with Covid-19?” as “yes”, 24.7% said “no”. While 57.1% of them answered the question, “Are you knowledgeable enough about Covid-19?” as “no”, 34.2% said that they were undecided. While 65.8% of the participating students answered the question, “Would you like to receive training on Covid-19?” as yes, 33.8% said that they were undecided.

The mean scores the participants obtained from the overall CAAS and its concern, control, curiosity, and confidence subscales were 77.25 (±8.69), 11.33 (±1.94), 20.89 (±2.70), 19.36 (±3.06) and 25.64 (±3.07) respectively (Table 1).
Table 1
Distribution of the mean scores the participants obtained from the Career Adapt-Ability Scale (CAAS) and Courtauld Emotion Control Scale (CECS) (n=219)

| Subscales of the Career Adapt-Ability Scale | M   | SD  | Min | Max | 95% CI of the median |
|---------------------------------------------|-----|-----|-----|-----|---------------------|
|                                             |     |     |     |     | UL                  |
|                                             |     |     |     |     | LL                  |
| Concern                                     | 11.33 | 1.94 | 3   | 15  | 10.26               |
|                                             |     |     |     |     | 12.57               |
| Control                                     | 20.89 | 2.70 | 8   | 25  | 19.19               |
|                                             |     |     |     |     | 22.29               |
| Curiosity                                   | 19.36 | 3.06 | 10  | 25  | 18.03               |
|                                             |     |     |     |     | 20.76               |
| Confidence                                  | 25.64 | 3.07 | 14  | 30  | 23.98               |
|                                             |     |     |     |     | 26.79               |
| Total                                       | 77.25 | 8.69 | 44  | 95  | 73.40               |
|                                             |     |     |     |     | 81.74               |

| Subscales of the Courtauld Emotion Control Scale | Ort | SS  | Min | Max | UL | LL |
|-------------------------------------------------|-----|-----|-----|-----|----|----|
| Anger Control                                   | 16.24 | 2.99 | 9   | 26  | 15.30 | 16.91 |
| Anxiety Control                                 | 16.17 | 2.15 | 9   | 25  | 15.31 | 17.71 |
| Unhappiness Control                             | 16.47 | 2.95 | 10  | 25  | 15.36 | 17.76 |
| Total                                           | 48.87 | 6.16 | 35  | 69  | 46.66 | 52.55 |

Note: M = mean, SD = Standard deviation, Min = minimum value, Max = maximum value, 95% CI = Confidence interval at 95%, LL = lower limit, UL = upper limit.

The mean scores the participants obtained from the overall CECS and its Anger Control, Anxiety Control and Unhappiness Control subscales were $48.87 \pm 6.16$, $16.25 \pm 2.99$, $16.17 \pm 2.15$ and $16.47 \pm 2.95$ respectively (Table 1).

**Effected on Intern Healthcare Students’ Career Adaptability and Ability to Manage Emotions Some of Their Socio-demographic Characteristics**

In Table 2, the correlation between the mean scores the participating students obtained from the CAAS and some of their socio-demographic characteristics was demonstrated. As is seen in the table, the mean score obtained from anxiety subscale by the female students was statistically significantly higher than was that obtained by the male students ($t = 2.595, p = 0.010$). The mean scores the midwifery and social work students obtained from the anxiety subscale were statistically significantly higher than the mean scores obtained by the nursing and physiotherapy and rehabilitation students ($t = 4.174, p = 0.007$).
Table 2
Correlation between the mean Scores the Participating Students obtained from the Career Adaptability Scale (CAAS) and Some of Their Socio-demographic Characteristics (n = 219)

| Subscales of the Career Adapt-Ability Scale | Characteristic (sex) | n  | Mean ± SD | t*  | p    |
|--------------------------------------------|----------------------|----|-----------|-----|------|
| Concern                                    | Women                | 194| 11.45±1.70 | 2.595| **0.010** |
|                                            | Men                  | 25 | 10.40±2.90 |     |      |
| Control                                    | Women                | 194| 20.92±2.59 | 0.352| 0.725 |
|                                            | Men                  | 25 | 20.72±3.49 |     |      |
| Curiosity                                  | Women                | 194| 19.41±3.03 | 0.766| 0.444 |
|                                            | Men                  | 25 | 18.92±3.35 |     |      |
| Confidence                                 | Women                | 194| 25.66±2.97 | 0.277| 0.782 |
|                                            | Men                  | 25 | 25.48±3.86 |     |      |
| Total                                      | Women                | 194| 77.47±8.27 | 1.059| 0.291 |
|                                            | Men                  | 25 | 75.52±11.47|     |      |

| Subscales of the Career Adapt-Ability Scale | Characteristic (department at school) | n  | Mean ± SD | f**  | p    |
|--------------------------------------------|---------------------------------------|----|-----------|------|------|
| Concern                                    | Nursing                               | 81 | 11.20±1.92 | 4.174| **0.007** |
|                                            | Midwifery                             | 46 | 11.97±1.42 |     |      |
|                                            | Physical therapy and rehabilitation   | 64 | 10.81±2.18 |     |      |
|                                            | Social work                           | 28 | 11.85±1.84 |     |      |
| Control                                    | Nursing                               | 81 | 21.13±2.48 | 2.445| 0.065 |
|                                            | Midwifery                             | 46 | 21.56±2.50 |     |      |
|                                            | Physical therapy and rehabilitation   | 64 | 20.42±3.03 |     |      |
|                                            | Social work                           | 28 | 20.21±2.62 |     |      |

* The independent samples t-test is significant at p <0.01 level.

** The ANOVA test is significant at p <0.01 level.
| Subscales of the Career Adapt-Ability Scale | Characteristic (sex)                          | n   | Mean ± SD   | t*  | p    |
|-------------------------------------------|----------------------------------------------|-----|-------------|-----|------|
| Curiosity                                 | Nursing                                      | 81  | 19.28±2.95  | 0.902 | 0.441 |
|                                           | Midwifery                                   | 46  | 19.91±3.06  |      |      |
|                                           | Physical therapy and rehabilitation         | 64  | 18.96±3.22  |      |      |
|                                           | Social work                                 | 28  | 19.57±3.02  |      |      |
| Confidence                                | Nursing                                      | 81  | 25.77±2.87  | 0.427 | 0.734 |
|                                           | Midwifery                                   | 46  | 25.90±3.16  |      |      |
|                                           | Physical therapy and rehabilitation         | 64  | 25.48±3.29  |      |      |
|                                           | Social work                                 | 28  | 25.17±3.07  |      |      |
| Total                                     | Nursing                                      | 81  | 77.40±8.55  | 1.43 | 0.217 |
|                                           | Midwifery                                   | 46  | 79.34±8.26  |      |      |
|                                           | Physical therapy and rehabilitation         | 64  | 75.77±9.00  |      |      |
|                                           | Social work                                 | 28  | 76.82±8.79  |      |      |

| Subscales of the Career Adapt-Ability Scale | Characteristic (expectations of the future) | n   | Mean ± SD   | f**  | p    |
|-------------------------------------------|---------------------------------------------|-----|-------------|------|------|
| Concern                                   | Better than today                           | 141 | 11.81±1.65  | 13.646 | 0.000 |
|                                           | Not different from today                    | 37  | 10.29±2.24  |      |      |
|                                           | Worse than today                            | 41  | 10.63±2.06  |      |      |
| Control                                   | Better than today                           | 141 | 21.32±2.41  | 5.551 | 0.004 |
|                                           | Not different from today                    | 37  | 19.83±2.20  |      |      |
|                                           | Worse than today                            | 41  | 20.39±3.62  |      |      |
| Curiosity                                 | Better than today                           | 141 | 20.00±3.51  | 9.611 | 0.000 |
|                                           | Not different from today                    | 37  | 18.45±3.23  |      |      |
|                                           | Worse than today                            | 41  | 17.95±3.22  |      |      |

* The independent samples t-test is significant at p <0.01 level.

** The ANOVA test is significant at p <0.01 level.
| Subscales of the Career Adapt-Ability Scale | Characteristic (sex) | n  | Mean ± SD | t*     | p   |
|-------------------------------------------|----------------------|----|-----------|--------|-----|
| **Confidence**                            | Better than today    | 141| 25.95±3.08| 2.159  | 0.118|
|                                            | Not different from today | 37 | 25.08±3.07 |        |     |
|                                            | Worse than today     | 41 | 25.02±2.97 |        |     |
| **Total**                                 | Better than today    | 141| 79.09±7.92 | **10.042** | 0.000|
|                                            | Not different from today | 37 | 73.37±8.26 |        |     |
|                                            | Worse than today     | 41 | 74.12±9.77 |        |     |

* The independent samples t-test is significant at p <0.01 level.

** The ANOVA test is significant at p <0.01 level.

The students who expected that the future would be better than today obtained a statistically significantly higher mean score from the overall CAAS (t = 10.042, p = 0.000) and its anxiety (t = 13.646, p = 0.000), control (t = 5.551, p = 0.004) and curiosity (t = 9.611, p = 0.000) subscales than did the students who expected that the future would be worse than today or would not be different from today (Table 2).

In Table 3, the correlation between the mean scores the participating students obtained from the CECS and some of their socio-demographic characteristics was demonstrated. The mean scores the midwifery and physiotherapy and rehabilitation students obtained from the overall CECS (t=2.627, p=0.048) and its anxiety subscale (t=2.957, p=0.033) were statistically significantly higher than were the scores obtained by the nursing and social work students. The students who expected that the future would be better than today obtained statistically significantly higher scores from the anxiety subscale of the CECS (t=13,646, p=0,000) than did the students who expected that the future would be worse than today or would not be different from today (Table 3). The mean scores the students who expected that the future would not be different from today obtained statistically significantly higher scores from the unhappiness subscale of the CECS (t=5.551, p=0.004) than did the students who expected that the future would be better than today or worse than today (Table 3). The mean scores the students who were willing or very willing to give care to patients with Covid-19 obtained statistically significantly higher scores from the unhappiness subscale of the CECS (x²=2.837, p=0.048) than did the students who were not willing or not willing at all (Table 3). The participating students were willing to give healthcare to patients with Covid-19, but they were also emotionally unhappy with this situation (this adversely affected them and made them unhappy).
Table 3
Correlation between the mean Scores the Participating Students obtained from the Courtauld Emotion Control Scale (CECS) and Some of Their Socio-demographic Characteristics (n = 219)

| Subscales of the Courtauld Emotion Control Scale | Characteristic (department at school) | n   | Mean ± SD     | f*  | p   |
|-------------------------------------------------|--------------------------------------|-----|---------------|-----|-----|
| Anger control                                   | Nursing                              | 81  | 15.72±1.74    | 1.987 | 0.117 |
|                                                 | Midwifery                            | 46  | 16.13±2.64    |      |     |
|                                                 | Physical therapy and rehabilitation   | 64  | 16.59±2.98    |      |     |
|                                                 | Social work                          | 28  | 17.14±2.77    |      |     |
| Anxiety control                                 | Nursing                              | 81  | 15.80±1.74    | **2.627** | 0.048 |
|                                                 | Midwifery                            | 46  | 15.95±2.37    |      |     |
|                                                 | Physical therapy and rehabilitation   | 64  | 16.49±2.40    |      |     |
|                                                 | Social work                          | 28  | 16.92±2.01    |      |     |
| Unhappiness control                             | Nursing                              | 81  | 16.04±2.76    | 1.097 | 0.352 |
|                                                 | Midwifery                            | 46  | 16.43±3.27    |      |     |
|                                                 | Physical therapy and rehabilitation   | 64  | 16.90±3.10    |      |     |
|                                                 | Social work                          | 28  | 16.75±2.60    |      |     |
| Total                                           | Nursing                              | 81  | 47.53±6.18    | **2.957** | 0.033 |
|                                                 | Midwifery                            | 46  | 48.52±5.93    |      |     |
|                                                 | Physical therapy and rehabilitation   | 64  | 49.95±6.64    |      |     |
|                                                 | Social work                          | 28  | 50.82±4.46    |      |     |
| Subscales of the Courtauld Emotion Control Scale | Characteristic (Expectations of the future) | n   | Mean ± SD     | f*  | p   |
| Anger control                                   | Better than today                    | 141 | 16.25±2.91    | 0.930 | 0.396 |
|                                                 | Not different from today              | 37  | 16.72±2.98    |      |     |
|                                                 | Worse than today                     | 41  | 15.80±3.25    |      |     |

* The ANOVA test is significant at the p level of <0.05.

** Kruskal Wallis test is significant at the p level of <0.05.
| Subscales of the Courtauld Emotion Control Scale | Characteristic (department at school) | n  | Mean ± SD | f*  | p       |
|-----------------------------------------------|--------------------------------------|----|-----------|-----|---------|
| Anxiety control                               | Better than today                    | 141| 16.42±2.17| 3.057| 0.049   |
|                                               | Not different from today              | 37 | 15.88±2.08|     |         |
|                                               | Worse than today                     | 41 | 15.56±2.01|     |         |
| Unhappiness control                            | Better than today                    | 141| 15.90±2.86| 8.066| 0.000   |
|                                               | Not different from today              | 37 | 17.81±2.91|     |         |
|                                               | Worse than today                     | 41 | 17.19±2.82|     |         |
| Total                                         | Better than today                    | 141| 48.57±6.18| 1.313| 0.271   |
|                                               | Not different from today              | 37 | 50.38±6.49|     |         |
|                                               | Worse than today                     | 41 | 48.56±5.72|     |         |
| Subscales of the Courtauld Emotion Control Scale | Characteristic (Willingness to care for Covid-19 patients) | n  | Mean ± SD | $\chi^2$** | p       |
| Anger control                                 | Very Willing                         | 4  | 18.50±4.93| 2.060| 0.107   |
|                                               | Willing                              | 54 | 15.55±2.61|     |         |
|                                               | Not Willing                          | 119| 16.50±3.21|     |         |
|                                               | Not Willing At All                   | 42 | 16.16±2.39|     |         |
| Anxiety control                               | Very Willing                         | 4  | 17.00±1.41| 0.258| 0.855   |
|                                               | Willing                              | 54 | 16.27±2.16|     |         |
|                                               | Not Willing                          | 119| 16.12±2.13|     |         |
|                                               | Not Willing At All                   | 42 | 16.14±2.24|     |         |
| Unhappiness control                            | Very Willing                         | 4  | 18.25±2.98| 2.837| 0.048   |
|                                               | Willing                              | 54 | 15.68±2.69|     |         |
|                                               | Not Willing                          | 119| 16.84±3.10|     |         |
|                                               | Not Willing At All                   | 42 | 16.23±2.68|     |         |

* The ANOVA test is significant at the p level of <0.05.

** Kruskal Wallis test is significant at the p level of <0.05.
| Subscales of the Courtauld Emotion Control Scale | Characteristic (department at school) | n  | Mean ± SD    | f*   | p    |
|-------------------------------------------------|--------------------------------------|----|--------------|------|------|
| Total                                           | Very Willing                         | 4  | 53.75±9.17   | 2.058| 0.107|
|                                                 | Willing                              | 54 | 47.51±5.12   |      |      |
|                                                 | Not Willing                          | 119| 49.36±6.65   |      |      |
|                                                 | Not Willing At All                   | 42 | 48.40±5.27   |      |      |

* The ANOVA test is significant at the p level of <0.05.

** Kruskal Wallis test is significant at the p level of <0.05.

Correlation between Intern Healthcare Students’ Career Adapt-Ability and Emotion Control

There was a statistically significant negative correlation between the control subscale of the CAAS and the anxiety control and unhappiness control subscales of the CECS (p ≤ 0.05) (Table 4).

**Table 4**
Correlation between Career Adapt-Ability Scale (CAAS) and Courtauld Emotion Control Scale (CECS) Scores

|                   | CECS anger control | CECS anxiety control | CECS unhappiness control | CECS Total |
|-------------------|--------------------|----------------------|--------------------------|------------|
| CAAS anxiety      | r -0.080           | -0.021               | -0.070                   | -0.076     |
|                   | p 0.242            | 0.763                | 0.303                    | 0.267      |
| CAAS control      | r -0.060           | -0.156*              | -0.129                   | -0.145*    |
|                   | p 0.378            | 0.021                | 0.045                    | 0.032      |
| CAAS curiosity    | r -0.045           | -0.012               | -0.103                   | -0.074     |
|                   | p 0.508            | 0.863                | 0.129                    | 0.280      |
| CAAS confidence   | r -0.020           | 0.036                | 0.053                    | 0.030      |
|                   | p 0.773            | 0.595                | 0.437                    | 0.660      |
| CAAS Total        | r -0.057           | -0.038               | -0.075                   | -0.074     |
|                   | p 0.404            | 0.584                | 0.275                    | 0.279      |

** The correlation was significant at the p level of ≤0.01.

Furthermore, it was found that CAAS and CECS are predictors of expected regarding during COVID-19, as well as department at school and position do you dream of being in after graduation about Willingness to
care for Covid-19 patients having been in contact with someone, as well as having enough knowledgeable related with the disease are predictors for receive training regarding COVID-19 (Table 5). Two models contribute to the explained variance of CAAS and CECS regarding COVID-19 with over 50%, and career planning regarding during COVID-19 was explained by 5.1%.

Table 5

| CAAS Total | CECS Total |
|------------|------------|
| R² | F | P | R² | F | P |
| 0.121 | 3.557 | 0.001 | 0.070 | 1.967 | 0.050 |

| R² | TE | β | t | P | R² | TE | β | t | P |
|----|----|---|---|---|----|----|---|---|---|
| Department at school | -1.128 | -1.145 | -2.072 | 0.039 | 1.394 | 1.241 | 3.345 | 0.001 |
| Expectations of the future | -2.841 | -2.717 | -4.046 | 0.000 | 1.661 | 1.538 | 3.091 | 0.758 |
| What position do you dream of being in after graduation? | 1.146 | 1.149 | 2.143 | 0.033 | -0.837 | -1.146 | -2.048 | 0.042 |
| Willingness to care for Covid-19 patients | 1.364 | 1.117 | 2.718 | 0.037 | 0.500 | 0.006 | 0.082 | 0.935 |
| Are you knowledgeable enough about Covid-19? | 0.531 | 0.922 | 0.038 | 0.576 | 0.565 | 0.908 | 1.699 | 2.298 | 0.025 |
| Would you like to receive training on Covid-19? | 0.531 | 0.922 | 0.066 | 0.994 | 0.321 | -0.031 | 0.443 | -0.005 | 0.944 |

Note: TE: Typical error; β: beta; F= Snedecor’s F, t = Student’s t, p = significance level

Discussion

Aim of this study was determine the correlate between intern healthcare students’ career adaptability and their ability to manage emotions during the Covid-19 pandemic. Intern healthcare students in training are confronting diverse educational challenges caused by interrupted studies and modified learning
strategies, besides going through situations related with the pandemic that could affect their mental health due to the presence of stress, fear, and poor knowledge about COVID-19 [3].

In the present study, when the participating students were asked the question, “What position do you dream of being in after graduation?”, 44.1% of them stated that they planned to work in the public sector. In our society, there is a perception that for those in the health field, it is easy to find a job. However, unfortunately, difficulties faced by health personnel in finding a job are overlooked. Although health students have the opportunity to find jobs in the public and private sectors, they must take exams to be appointed to a position in the public work. Among the factors urging students to work in the public sector are the excessive workload, difficult working conditions and low wages in the private sector.

In the present study, that the mean scores the students obtained from the anger control, anxiety control, and unhappiness control subscales were a little above the middle level suggests that the students tended to suppress their feelings of anger, anxiety, and unhappiness consciously and hesitated to express them. The mean score the students obtained from the CECS (48.87 ± 6.16) suggests that the students often tended to suppress their emotions consciously and avoided expressing their emotions. For individuals to understand the emotions of others, they should be able to recognize their own feelings and thoughts, to control and manage them. Therefore, they should have a high level of emotional control [12]. In our study, the mean scores obtained from the overall CECS and its Anxiety Control subscale by the students studying in the social work department were statistically significantly higher than were those obtained by the students studying in the nursing, midwifery, and physiotherapy and rehabilitation departments. This study found that anxiety, unhappiness is a predictor of emotions regarding COVID-19; these results were similar to those by Bakioğlu and Begum et al.[13, 14]. This may explain that anxiety is a strong emotion that affects feelings and thoughts.

It was observed that the students studying in the social work department tended to suppress anxiety control consciously and that they were reluctant to express their feelings. The students studying at the nursing department expressed their feelings more easily. This result can be explained by the intellectual skills gained through the university education, and the philosophy and values of nursing. Inclusion of courses such as self-knowledge and communication, critical thinking, assertiveness training in the nursing education curriculum is useful in controlling students' emotion. On the other hand, their ability to control their emotions thanks to the holistic and humanistic perspective, the basic philosophy of nursing, they have gained and developed since the first year of their nursing education sheds light on the study results [2].

Of the participants, those who expected that the future would be better than today obtained statistically significantly higher scores from the anxiety control subscale of the CECS than did the other participants, which suggests that they did not want to show their anxiety or fear. Of the participants, those who expected that the future would not be different from today obtained statistically significantly higher scores from the unhappiness control subscale of the CECS than did the other participants. The participants were said that those who expected that the future would not be different from today tended
to suppress their unhappiness control consciously. It can be thought that the COVID – 19 pandemic processes we are in may have created an effect of uncertainty. In study of Fernandez et.al., was determined, although the nursing students have knowledge about COVID-19, fear may be related with the uncertainty of future close contact with patients, lack of knowledge of real settings, and discomfort caused by special protection, upon the suffering and death of critical patients and fear of infecting the family [3].

In our study, the mean scores the female students obtained from the anxiety subscale of the CAAS were statistically significantly higher than were those obtained by the male students. Anxiety, one of the sources of career adaptability, is based on individuals' awareness of their abilities and making plans for their professional future. It can be thought that female students acted in a more planned way and were more aware of their abilities compared to the male students. The students studying at the midwifery department students obtained statistically significantly higher scores from the anxiety subscale of the CAAS than did the students studying in the social work, nursing, and physiotherapy departments. Since midwives are mostly women, it can be said that they are more planned for the future. The profession of midwifery includes the ability to deliver the baby, to act independently, to use initiative and creativity. Midwifery implements the requirements of science and art in the protection and improvement of public health at the highest level within the scope of the holistic perspective. Midwifery plans and carries out health education and counseling. Midwifery can be associated with its professionally independent and creative elements, self-discovery of the person within the career adaptability, and the person's process reaching self-awareness based on his or her own abilities.

The students were willing to give healthcare to patients with Covid-19, but they were also emotionally unhappy with this situation (this adversely affected them and made them unhappy). In addition to the uncertainty experienced during the pandemic, fear of contracting the disease caused them to suffer from emotions such as fear, unhappiness, hopelessness, and despair. However, they were aware that they had to do their duties. In the present study, the participating students’ statements demonstrated that most of them (64.4%) expected that the future would be better than today. The students who expected that the future would be better than today obtained statistically signicantly higher scores from the overall CAAS and its anxiety, control and curiosity subscales than did the students who expected that the future would be worse than today or would not be different from today. It can be said that more than half of the students were hopeful about the future and their career adaptability was positive. Studies indicate that meaningful life, optimism, hope, resilience and well-being are positively associated with career adaptability [15–20]. In another study, career adaptability levels of high school students who thought about their future and had dreams about the tenth year of their career were high [21]. The results of these studies are consistent with those of the present study.

Due to the recent pandemic in our country and in the other countries of the world, the need for healthcare professionals has increased, which has made them important people and members of a profession needed. It can be said that this situation encouraged the students to perform their tasks and increased their hope.
Conclusion

In the present study, the participating students tended to suppress their emotions and avoided expressing these feelings. They were willing to give healthcare to patients with Covid-19, but they were also emotionally unhappy with this situation (this adversely affected them and made them unhappy). Most of them wanted to work in the public sector, male students’ and social work students’ career adaptability levels were lower, the nursing students were better at controlling their emotions than were the students in other departments, most of them expected that the future would be better than today and were hopeful about the future. It is recommended that during their university education, male and social work students should be encouraged that they would be able to find a job after graduation. It is also recommended that students should be given training and seminars on the provision of care for patients with Covid-19. Lastly, it is recommended that students’ hope should be promoted, and that emotion control should be emphasized more in education programs.

Declarations

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Ethical approval

Approval from the Ethics Committee of Manisa Celal Bayar University Medicine Dean of Health Sciences (October 13, 2020, number 80433) was obtained to conduct the study. Written informed consent was obtained from all the participants. The study was carried out in accordance with the principles of the Declaration of Helsinki.

Availability of data and materials

The datasets used and/or analyses during the current study available from the corresponding author on reasonable request. The datasets are stored and maintained by the responsible author. If requested, the data connection link can be shared.

Authorship contribution statement

Nurgul Gungor Tavsanli: Conceptualization, Formal analysis, Writing - original draft, The conception and design of the study, Contact with the participants, Collection of the data, Analysis of the data, Drafting the article or revising it critically for important intellectual content, Final approval, Received permission from the ethics committee to conduct the study.
Sevgi Nehir: Conceptualization, Formal analysis, Writing - original draft, The conception and design of the study, Contact with the participants, Collection of the data, Analysis of the data, Drafting the article or revising it critically for important intellectual content, Final approval, Received permission from the ethics committee to conduct the study.

Declaration of competing interest

The authors have no conflicts of interest to declare.

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