

# Is the audiology education process effective on professional self-esteem and career decision-making self-efficacy?

Deniz Uğur CENGİZ<sup>1</sup>, Sanem Can ÇOLAK<sup>1</sup>, Büşra KURTCU<sup>2</sup>, Emre Akgün ÖZDEMİR<sup>2</sup>, Furkan Ali FİLİZ<sup>2</sup>

<sup>1</sup>Department of Audiology, Faculty of Health Sciences, İnönü University, Malatya, Turkey

<sup>2</sup>Department of Audiology, Institute of Health Sciences, İnönü University, Malatya, Turkey

## ABSTRACT

### ABSTRACT

**Objective:** We conducted this study to evaluate the effect of the audiology undergraduate program education on students' professional self-esteem and career decision-making.

**Method:** This study, which was planned as a descriptive cross-sectional study, included a total of 223 students, 168 females (75.3%) and 55 males (24.7%), studying at the Department of Audiology, Faculty of Health Sciences, a university in Türkiye, who were open to communication and agreed to participate in the study. Via Google Forms, we administered a Personal Introduction Form, Arıçak Professional Self-Esteem Scale (APSES), and the Career Decision-Making Self-Efficacy Scale (CDSS).

**Results:** There was no statistically significant difference in the mean APSES total score according to the school years of the students ( $p \geq 0.05$ ). There was a statistically significant difference between school years and total scores and scores of all sub-dimensions of the CDSS ( $p < 0.05$ ). There was a moderate statistically significant positive correlation between students' APSES scores and CDSS scores ( $r = 0.459$ ,  $p = 0.001^*$ ).

**Conclusion:** We observed that audiology education was not effective on students' professional self-esteem, but it was effective on their career decision-making competence.

**Keywords:** audiology, undergraduate, professional self-esteem, career decision, student

## ÖZ

### Odyoloji eğitim süreci mesleki benlik ve kariyer kararı verme öz yeterlilik üzerinde etkili mi?

**Amaç:** Bu araştırma, odyoloji lisans programı eğitiminin öğrencilerin mesleki benlik saygısı ve kariyer kararı vermelerine etkisini değerlendirmek amacıyla yapılmıştır.

**Metod:** Tanımlayıcı kesitsel bir çalışma olarak planlanan bu çalışmaya Türkiye'de bir üniversitenin Sağlık Bilimleri Fakültesi Odyoloji Bilim Dalı'nda öğrenim gören iletişime açık olan ve araştırmaya katılmayı kabul eden 168 kız (%75,3) ve 55 erkek (%24,7) olmak üzere toplam 223 öğrenci dâhil edildi. Google Forms aracılığıyla Kişisel Tanıtım Formu, Arıçak Mesleki Benlik Saygısı Ölçeği (APSES) ve Kariyer Kararı Verme Yetkinliği Ölçeği (CDSS) uygulandı.

**Bulgular:** Öğrencilerin okul yıllarına göre APSES toplam puan ortalamalarında istatistiksel olarak anlamlı fark yoktu ( $p \geq 0,05$ ). Okul yılları ile CDSS'nin tüm alt boyutlarının toplam puanları ve puanları arasında istatistiksel olarak anlamlı bir fark vardı ( $p < 0,05$ ). Öğrencilerin APSES puanları ile CDSS puanları arasında orta düzeyde istatistiksel olarak anlamlı bir pozitif korelasyon vardı ( $r = 0,459$ ,  $p = 0,001^*$ ).

**Sonuç:** Odyoloji eğitiminin öğrencilerin mesleki benlik saygıları üzerinde etkili olmadığı ancak kariyer kararı verme yetkinlikleri üzerinde etkili olduğunu gözlemledik.

**Anahtar kelimeler:** odyoloji, lisans, mesleki benlik saygısı, kariyer kararı, öğrenci

Cite this article as: Cengiz, D.U., Çolak, S.C., Kurtcu, B., Özdemir, E.A., Filiz, F.A. (2023). Is the audiology education process effective on professional self-esteem and career decision-making self-efficacy?. Turk J Audiol Hearing Res 2023;6(3):82-88

## INTRODUCTION

It is important for the individual to choose the profession that is suitable for their personality, character, and abilities among various professions in terms of job satisfaction. While the individual's choice of a profession suitable for their self-concept strengthens their self-concept and makes them successful, choosing a profession that is incompatible with their self-concept leads to conflict and dissatisfaction (Şener, Karaca, Açıköz, & Süzer, 2011). Professional self-concept, which develops in connection with the

general self-concept, is an important element in the professional development of the individual. The concept of professional self-esteem is the perception of worthiness that is transformed into professional preference, required for individuals to be successful in their professional lives, and associated by individuals with the self (Kutlu & Soğukpınar, 2015). Positive professional self-esteem of individuals provides professional adaptation and job satisfaction (Şener et al., 2011). The concept of career, which

Correspondence Address/Yazışma Adresi: Deniz Uğur CENGİZ, İnönü University, Faculty of Health Sciences Battalgazi/Malatya, Turkey

E-mail: deniz.cengiz@inonu.edu.tr

Received/Geliş Tarihi: 28 Haziran 2023, Accepted/Kabul Tarihi: 6 Ağustos 2023, Available Online Date/Çevrimiçi Yayın Tarihi: 31 Aralık 2023

©Copyright 2023 by Turkish Association of Audiologists and Speech Pathologists - Available online at <https://dergipark.org.tr/en/pub/tjaudiologyandhear>

©Telif Hakkı 2023 Türkiye Odyologlar & Konuşma Bozuklukları Uzmanları Derneği - Makale metnine <https://dergipark.org.tr/tr/pub/tjaudiologyandhear> web sayfasından ulaşılabilir.

is a lifelong, dynamic process that includes adaptation and job satisfaction in the chosen profession, develops linearly with the roles, development, change, and transformation of individuals in their professions (Kuzgun, 2011). Career is influenced by life and also shapes the lives of individuals (Gökdeniz & Merdan, 2011). Deciding on a career is a long process involving various factors such as determining the areas that individuals enjoy, seeing their potential, and evaluating their options. With the career decision, the economic situation, personal life, productivity, and position of individuals begin to take shape.

Making a career decision is a complex process and it is not always easy to make a correct and healthy career decision. The uncertainties experienced by the individual in the career decision-making process lead the individual to a situation called “career indecision”. Career indecision is defined as the inability of the individual to gain the competence to make career decisions. Career decision-making competence, which has an important place in an individual’s professional development and career choice, expresses the responsibilities that the individual will undertake in their career and their belief that they will successfully overcome these responsibilities. It has been stated that individuals with high career decision-making competence can evaluate various career options, orient themselves to a career, and make preparations accordingly, and have higher levels of career maturity (Lee, 2007; Ziebell, & Louise, 2010). Individuals with low career decision-making competence are reported to postpone making career decisions, avoid making decisions, not being determined about progressing toward their career goal, have low expectations, and experience anxiety about their performance in planning careers (Lent, Brown, & Hackett, 2002).

Audiology is the branch of science in which the hearing and balance system, and disorders related to these systems are investigated. The audiology program is usually a 4-year undergraduate program within the Faculty of Health Sciences of universities and the education process is completed with theoretical knowledge and practical courses (Özkan & Yiğit, 2022). The theoretical knowledge that students learn in this whole process, their instructors, departmental colleagues, and internships in different working areas provide students with an experience and affect their professional self-esteem and career decision-making competence. Since the audiology undergraduate program is a newly developing program in Türkiye, the effect of the education received by students on their professional self-esteem and career decision-making competencies is not known. Accordingly, this study was conducted to determine the effect of the education received by students in the Department of Audiology on their professional self-esteem and career decision-making competencies. In the literature, there is no national or international study evaluating the professional self-esteem and career decision-making competencies of audiology students. Our study will be a first in this respect and will contribute to the literature.

## METHODS

### Type of Research

This is a descriptive cross-sectional study conducted to obtain information about the effect of audiology education on professional self-esteem and career decision-making competence.

### Population and Sample of the Study

The study population consisted of 350 students in the Department of Audiology at the Faculty of Health Sciences of a university in Türkiye. The sample consisted of 223 students who accepted to participate in the study and were actively enrolled in the program. 7 students who did not agree to participate in the study and 25 who were not actively enrolled were excluded. In the study, no sample calculation was made and it was aimed to reach all students in the population. Seventy percent of the population was reached.

### Data Collection Tools and Data Collection

In the study, a Personal Introductory Form, Arıcak Professional Self-Esteem Scale, and the Career Decision-Making Self-Efficacy Scale were administered to audiology students via Google Forms between March 2023 and April 2023.

### Personal Introductory Form

The researcher created this 11-item introductory form by reviewing the literature to determine some characteristics of the individuals such as socio-demographic characteristics, school year, and department satisfaction.

### Arıcak Professional Self-Esteem Scale (APSES)

Arıcak developed the APSES and established its validity and reliability. This scale aims to measure the attitudes of individuals aged 17 and over who is about prefer a profession, receiving vocational training in a field, or practicing a profession. The evaluation is made by scoring the positive sentences on the scale as follows: strongly agree 5, agree 4, undecided 3, disagree 2, and strongly disagree 1. Negative sentences are scored in the opposite way. The APSES consists of 30 items: Positive items – 2, 5, 7, 9, 11, 13, 14, 16, 18, 20, 24, 26, 28, and 30, and negative items – 1, 3, 4, 6, 8, 10, 12, 15, 17, 19, 21, 22, 23, 25, 27, and 29. The score given to each item in the scale is summed and a total score is obtained. The score range of the scale varies between 30 and 150. High or low scores from the scale indicate high or low professional self-esteem. (Arıcak, 1999).

### Career Decision-Making Self Efficacy Scale (CDSS)

Ulaş & Yıldırım (2016) developed the CDSS and established its validity and reliability. The scale consists of 45 items and aims to measure university students’ career decision-making competency level. The scale has sections on job/professional knowledge, self-knowledge, career preference, ways of creating a career plan, and following professional issues, revealing students’ career decision-making competence levels. The scale is on a five-point scale (highly competent=5, competent=4, partially competent=3, not competent=2, not at all competent=1) and individuals are expected to choose the

appropriate rating corresponding to each item. The score given for each option is accepted during the evaluation process. The sum of items 1–11 constitutes the job/professional knowledge sub-dimension. The sum of items 35–44 constitutes the self-knowledge factor sub-dimension. The sum of items 12–16, and 45 constitutes the sub-dimension of career choice knowledge. The sum of items 17–30 constitutes the sub-dimension of knowledge of ways to create a career plan. The sum of items 31–34 constitutes the sub-dimension of knowledge of the following professional issues. The total scale score is obtained by summing the scores of the answers given to each item. Higher total sub-dimension scores indicate higher competency of the individual in that particular sub-dimension (Taylor & Betz, 1983; Ulaş & Yıldırım, 2016).

### Statistical Analysis

We used the IBM Statistical Package for Social Sciences (SPSS) program version 25 (Statistical Program in Social Sciences) for data analysis. We checked whether the data included in the study fit the normal distribution. A p-value less than 0.05 was assumed significant for comparison tests. Cronbach  $\alpha$  coefficient was used to determine the reliability analysis of the scales. Number, percentage, mean, standard deviation, and median values were used as descriptive statistics to evaluate data. Since the variables were not normally distributed ( $p > 0.05$ ), we completed the analysis with nonparametric test methods. The Mann-Whitney U Test was used for two-group data comparisons and the Kruskal Wallis Test was used for four-group data comparisons. Since the p-value would increase depending on the increase in the number of comparisons in variables with a difference, Bonferroni corrected p-value was used and calculated with “0.05/pair comparison”. After the Kruskal-Wallis test, the p values obtained by the Mann-Whitney test were compared with the calculated p values and thereby the result was determined.

Correlation coefficients provide information about the strength (degree) and direction of the relationship between variables. Correlation coefficients vary between -1 and +1. Signs indicate the direction of the relationship. The strength of the relationship increases as it approaches -1 and +1, while it decreases as it approaches 0. Values frequently used in the evaluation of findings are interpreted as: 0.00–0.19 with no relationship (insignificantly low relationship), 0.20–0.39 with weak relationship, 0.40–0.69 with moderate relationship, 0.70–0.89 strong relationships, and 0.90–1.00 very strong relationship (Öztuna, Elhan, & Kurşun, 2008). Since the variables included in the study were normally distributed, the Spearman rank correlation coefficient was used.

### Ethical Principles of Research

Approval was obtained from the İnönü University’s Institute of Health Sciences Non-Interventional Clinical Research Ethics Committee (decision number: 2023/4406 date: 24–01–2023) and all individuals participating in the study.

## RESULTS

Descriptive information of the students participating in the study is given in Table 1.

A total of 223 students, 168 (75.3%) females and 55 (24.7%) males, were included in the study and the average age of the students was 21.47 years. Of the students, 54 (24.2%) were year 1, 55 (24.7%) were year 2, 62 (27.8%) were year 3, and 52 (23.3%) were grade 4 (Table 1).

The comparison of the APSES and CDSS scale scores of the students participating in the study according to their years of education is given in Table 2.

There was no statistically significant difference in the total mean scores of the APSES scale according to the years of education of the students ( $p \geq 0.05$ ). There was a statistically significant difference between school years in terms of the total score and sub-dimensions of CDSS, which are job/professional knowledge, self-knowledge, career preference knowledge, career planning, and following professional issues ( $p < 0.05$ ). Pairwise comparisons were made to calculate which groups were different. A statistically significant difference was found between year 4 and 1, 2, and 3 for job/professional knowledge scores ( $p < 0.008$ ). There was a statistically significant difference between year 4 and years 1 and 3 ( $p < 0.05$ ) for the total score and sub-dimensions of the CDSS which are self-knowledge, knowledge of career choice, career planning, and following professional issues (Table 2).

The correlation between the students’ APSES and CDSS scale total and sub-dimension scores is given in Table 3.

**Table 1.** Descriptive information of participants

Variable	Group	Frequency (n)	Percent (%)
Sex	Female	168	75.3
	Male	55	24.7
School Year	Year 1	54	24.2
	Year 2	55	24.7
	Year 3	62	27.8
	Year 4	52	23.3
Willing to enroll to the program	Yes	178	79.8
	No	45	20.2
Department preference order at the University Entrance Exam	First	39	17.5
	2–5	88	39.5
	6–10	49	22.0
	11 or higher	47	21.1
Department satisfaction	Yes	189	84.8
	No	34	15.2
Total		223	100.0
Variable		Mean $\pm$ SD	M (Min – Max)
Age		21.47 $\pm$ 2.63	21 (18–43)

SD: standard deviation; n: number; M: median; Min: minimum value; Max: maximum value

**Table 2.** Comparison of scale scores according to school year

Variables	Groups	Mean ± SD	M (Min – Max)	Test Value	p Value	Difference	
APSES	Total score	Year 1	113.17±19.18	110.5(69–150)	4.734	0.192	None
		Year 2	121.04±16.62	123(83–146)			
		Year 3	114.98±20.32	117.5(66–149)			
		Year 4	115.37±25.39	117.5(38–150)			
CDSS	Job/professional information	Year 1	34.78±10.92	36.5(11–55)	17.649	0.001*	1–4. 2–4. 3–4
		Year 2	37.4±9.03	37(12–55)			
		Year 3	36.26±6.78	35(22–55)			
		Year 4	42.5±8.22	41.5(28–55)			
	Self-recognition	Year 1	33.19±10.52	33(10–50)	13.122	0.004*	1–4. 3–4
		Year 2	37.31±8.37	37(10–50)			
		Year 3	34.66±7.29	34(10–49)			
		Year 4	39.29±8.25	40(24–50)			
	Career choice knowledge	Year 1	20.15±6.35	21(6–30)	16.444	0.001*	1–4. 3–4
		Year 2	22.25±5.59	23(6–30)			
		Year 3	20.92±4.67	21.5(9–29)			
		Year 4	24.31±4.91	24(10–30)			
	Creating a career plan	Year 1	40.44±13.72	40(13–65)	16.388	0.001*	1–4. 3–4
		Year 2	45.67±11.71	46(13–65)			
		Year 3	41.94±10.01	41.5(14–65)			
		Year 4	49±10.18	49(27–65)			
	Following professional issues	Year 1	11.06±5.1	12(4–20)	16.991	0.001*	1–4. 3–4
		Year 2	12.47±4.51	12(4–20)			
		Year 3	11.45±3.66	12(4–20)			
		Year 4	14.27±3.54	14(5–20)			
Total score	Year 1	139.61±43.66	141(44–220)	18.674	0.001*	1–4. 3–4	
	Year 2	155.11±35.56	155(45–220)				
	Year 3	145.23±26.28	142(70–201)				
	Year 4	169.37±32.01	173(98–220)				

SD: standard deviation; M: median; test value: Kruskal-Wallis test value; p-value: statistical significance, \*p<0.05: there is a statistically significant difference between the groups.

**Table 3.** Correlation analysis of the relationships between scale scores

Scores		APSES Total Score	CDSS-Business Vocational Knowledge	CDSS- Self-Recognition	CDSS-Career Preference Information	CDSS-Career Planning	CDSS-Following Professional Subjects	CDSS Total Score
Age	r	0.069	0.219	0.214	0.299	0.211	0.214	0.237
	p	0.306	0.001*	0.001*	0.003*	0.002*	0.001*	0.001*
APSES Total Score	r		0.387	0.429	0.479	0.442	0.265	0.459
	p		0.001*	0.001*	0.001*	0.001*	0.001*	0.001*
CDSS-Business Vocational Knowledge	r			0.685	0.750	0.772	0.667	0.888
	p			0.001*	0.001*	0.001*	0.001*	0.001*
CDSS- Self-Recognition	r				0.773	0.788	0.639	0.865
	p				0.001*	0.001*	0.001*	0.001*
CDSS-Career Preference Information	r					0.758	0.582	0.850
	p					0.001*	0.001*	0.001*
CDSS-Career Planning	r						0.753	0.944
	p						0.001*	0.001*
CDSS-Following Professional Subjects	r							0.794
	p							0.001*

r; spearman rank correlation coefficient, \*p<0.05 there is a statistically significant relationship between the scale scores.

In the Spearman correlation analysis performed to examine the relationship between APSES scores and CDSS scores of audiology students, a moderately positive, statistically significant relationship was found between APSES and CDSS total scores (r=0.459, p=0.001\*) (Table 3).

## DISCUSSION

Career decision-making competence is very important, especially for university students at the stage of transition to professional life. Correct management of this process is effective in individuals' orientation towards the right career field for

them. Associating the profession chosen by the individual with their sense of self forms the basis of professional self-esteem. The training and experiences gained by individuals during their undergraduate education have an impact on their professional self-esteem and career selection process. We conducted the present study to determine the effect of the education received by students studying in the Department of Audiology on their professional self-esteem and career decision-making competencies.

The current study showed that the APSES scores of the students ranged between  $113.17 \pm 19.18$  and  $121.04 \pm 16.62$  according to their school year. These scores are similar to those reported in other studies in which students of health science departments were included (Kahraman & Fırat Kılıç, 2021; Değirmenci Öz, & Yıldız, 2019; Fırat Kılıç, 2018). The high scores are compatible with the fact that the students who participated in the study preferred the department willingly (79.8%) and were satisfied with the department (84.8%). In the literature, it has been reported that students who are generally highly satisfied with their department also have high professional self-esteem (Çivitci, 2014; Demir, Gürsoy, & Ada, 2011). The current study showed that the lowest score was obtained in 1<sup>st</sup>-year students, while the highest score was obtained in 2 year students. The fact that the lowest score was observed in 1 st-grade students, and the reason for this outcome may be that the students were introduced to the content of their program for the first time, and therefore, they may have had difficulties. Similarly, the highest score was observed in 2nd grade students, which may be due to the fact that there were more courses related to the profession in the curriculum of the students compared to the 1st year, and therefore, they received more information about the profession. However, when the comparison was made according to the school year, the differences between the APSES scores were not statistically significant. An examination of studies conducted with health sciences departments in the literature showed that no significant difference was obtained, similar to the current study, between school years in the studies in which Dinçer & Öztunç (2009) evaluated the professional self-esteem of nursing and midwifery department students, Tuna (2021) evaluated the professional self-esteem of physiotherapy and rehabilitation department students, Kahraman et al. (2021) evaluated the professional self-esteem of nursing department students (Kahraman et al., 2021; Tuna, 2021; Dinçer et al., 2009). The case was similar in studies conducted with students in different departments. Similar to our study, Efiltili & Çıkılı (2017) evaluated the professional self-esteem of students in the department of special education, Demir et al. (2011) & Körükçü & Oğuz (2011) evaluated the professional self-esteem of students in the department of preschool teaching, and they found no statistically significant relationship between school years (Efiltili et al., 2017; Demir et al., 2011; Körükçü et al., 2011). Vocational self-concept starts with the individual's university preference, becomes clearer with the vocational education they receive, and solidifies with real-world practice

(Lee, 2007). While this situation creates an expectation that the mean scores of professional self-esteem should be higher in senior-year students, no difference was observed between school years in terms of professional self-esteem levels. Similar results are observed in other studies conducted with other health sciences in the literature (Kahraman et al, 2021; Tuna, 2021; Dinçer et al., 2009). This is thought to be due to the fact that clinical courses in the field of health sciences are generally at every stage of the education process. In addition, the COVID-19 pandemic period and the recent earthquake disaster in the region caused education and training activities to be distant. Thus, it is thought that the inability of students to perform clinical practice and internship at an adequate level caused their work practices to be incomplete, and this situation caused no difference between the school years the current study. Kartal, Meral, Çetinkaya, & Terlemez (2022) examined the pandemic's effect on audiology students' attitudes towards the profession. They found that 93.10% of audiology students reported that the distance education implemented during the pandemic negatively affected the education they received. It was observed that this situation caused a decrease in the feelings and confidence of audiology undergraduate students regarding the profession (Kartal et al., 2022). In addition, Karakoç, Karabulut, Kartal, & Mujdeci (2022) reported that 62.2% of audiology undergraduate students reported that the COVID-19 pandemic caused them to review their career planning (Karakoç et al., 2022). Both studies support our opinion that the COVID-19 pandemic process affects professional self-esteem.

Another issue we examined in our study was the effect of the audiology education process on career decision-making competence. The total scores of the career decision-making competence scale ranged between  $139.61 \pm 43.66$  and  $169.37 \pm 32.01$ . The scores are similar to other studies conducted with health sciences students in the literature (Turan, 2021; Ulaş Kılıç, 2018). When the total score of the career decision-making competence scale and the scores of all sub-dimensions were analyzed, the mean scores of the senior year students were found to be statistically significantly higher than the students of other years. Similar to our study, in a study conducted by Aşık & Akgül (2022) on students studying in different programs at a university, the career decision-making competencies of senior year students were significantly higher than students of other years (Aşık et al, 2022). It is expected that students will become more realistic and more competent in career decision-making as their knowledge and skills about the career process increase with the increasing school year. However, career decision-making competence does not only depend on the school year. In the study conducted by Ulaş Kılıç (2018) on senior university students, career decision-making competence differed significantly according to the status of having work experience and gaining professional competence with the education received (Ulaş Kılıç, 2018). Ancın & Ulucan (2020) found a significant positive relationship between students' vocational motivation and career decisions and unemployment



anxiety, and a significant positive relationship between students' unemployment anxiety and career decisions in health services vocational school students (Ancin et al, 2020). Unemployment anxiety is among the factors that may affect the career decision of audiology students. Adalı, Uludağ, Meral, Kartal, Erbaşaran, İskender, & Konukseven (2019) investigated the levels of anxiety and hopelessness towards the profession in audiology students. They found that as unemployment anxiety increased, hopelessness towards the profession also increased (Adalı et al., 2019). In the current study, the correlation between professional self-esteem and career decision-making competence was evaluated and a moderately positive relationship was found. Career decision-making process is related to elements that make up professional self-esteem, such as interest in the profession, talent, and the individual's desire for self-development (Savickas, 2002). It is reported that the career decision-making competence levels of individuals who complete their professional development increase (Betz & Hackett, 1981). The results of our study support the results of the studies in the literature.

The above-mentioned factors are extremely effective in making career decisions and can sometimes make it very difficult for students to make career decisions. For this reason, with the decision of the Presidential Human Resources Office, the Career Planning course has been added to the curricula of 47 universities in Türkiye as of the fall semester of 2020–2021 and it is planned to be added to the curricula of all universities in the future to increase career awareness. Dalkılıç, Ata, Dalkılıç, & Aytaç (2022) examined the effect of Career Planning course on career decision-making competence and observed a statistically significant increase in career decision-making competence

scores of students after 14 weeks of the career planning course (Dalkılıç et al., 2022). Adding the Career Planning course to the Audiology curriculum should be considered as a method that can facilitate career decision-making in the education process of Audiology students.

## CONCLUSION

Although professional self-esteem and career decision-making competence are directly related to factors such as employment rate in the profession and professional income level, satisfaction with the education received during the education process, students' professional knowledge levels and skills are the most fundamental factors. In order for audiology students not to have difficulty in making career decisions, to increase their professional self-esteem and to make more competent decisions regardless of their school year, methods such as adding a Career Planning course to the audiology education curriculum and updating the content in educational methods that include professional practices such as clinical practice and internship should be addressed.

## Limitations

The validity of the research results is limited to the university students where the research was conducted. Although the Audiology education process in all universities across Türkiye shows a great similarity, there are some differences. In future studies, the effects of education level on professional self-esteem and career decision-making consciousness should be examined by evaluating the students studying Audiology in all universities across the country. It is also suggested that different factors, such as grade point average should be evaluated.

**Ethics Committee Approval:** Approval was obtained from the İnönü University's Institute of Health Sciences Non-Interventional Clinical Research Ethics Committee (decision number: 2023/4406 date: 24-01-2023).

**Peer-review:** Externally peer-reviewed.

**Informed Consent:** Informed consent was obtained from the patients who participated in this study.

**Author Contributions:** Concept - D.U.C; Design - D.U.C; Supervision - D.U.C; Resources - D.U.C, S.C.Ç; Data Collection and/or Processing - D.U.C, B.K, E.A.Ö, F.A.F; Analysis and/or Interpretation - D.U.C, S.C.Ç, B.K, E.A.Ö; Literature Search - D.U.C, S.C.Ç, B.K, E.A.Ö, F.A.F; Writing Manuscript - D.U.C, S.C.Ç, B.K, E.A.Ö.

**Conflict of Interest:** The authors have no conflict of interest to declare.

**Financial Disclosure:** The authors declared that this study has received no financial support.

**Etik Kurul Onayı:** İnönü University Üniversitesi Sağlık Bilimleri Enstitüsü Girişimsel Olmayan Klinik Araştırmalar Etik Kurulundan onay alındı (karar numarası: 2023/4406 tarih: 24-01-2023).

**Hakem Değerlendirmesi:** Dış Bağlımsız.

**Bilgilendirilmiş Onam:** Katılımcılardan yazılı bilgilendirilmiş onam alınmıştır.

**Yazar Katkıları:** Fikir - D.U.C; Tasarım - D.U.C; Denetleme - D.U.C; Kaynak - D.U.C, S.C.Ç; Veri Toplanması ve/veya İşlemesi - D.U.C, B.K, E.A.Ö, F.A.F; Analiz ve/veya Yorum - D.U.C, S.C.Ç, B.K, E.A.Ö; Literatür Taraması - D.U.C, S.C.Ç, B.K, E.A.Ö, F.A.F; Yazıyı Yazan - D.U.C, S.C.Ç, B.K, E.A.Ö.

**Çıkar Çatışması:** Yoktur.

**Finansal Destek:** Finansal destek kullanılmamıştır.

## REFERENCES

- Adalı, İ., Uludağ, B., Meral, M., Kartal, A., Erbaşaran, E., İskender, S., & Konukseven, Ö. (2019) Odyoloji bölümü öğrencilerinin mesleğe yönelik kaygı ve umutsuzluk düzeylerinin belirlenmesi. *Türk Odyoloji ve İşitme Araştırmaları Dergisi*, 2(3), 13–22.
- Ancin, V., & Ulucan, S. (2020) Mesleki Güdülenmenin Kariyer Kararına Etkisinde İşsizlik Kaygısının Rolü; Sağlık Hizmetleri Meslek Yüksekokulu Örneği. *Management and Political Sciences Review*, 2(1), 151–175.
- Arıcaç, T. (1999) Öğretmen adaylarının benlik saygısı ve mesleki benlik saygılarının geliştirilmesine yönelik bir grupta psikolojik danışma uygulaması. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 11(11), 11–22.
- Aşık, G., & Akgül, H. (2022) Üniversite öğrencilerinin kariyer stresleri, kariyer kararında ailenin etkisi ve kariyer kararı verme yetkinlik algıları arasındaki ilişkinin incelenmesi. *Van Yüzüncü Yıl Üniversitesi Eğitim Fakültesi Dergisi*, 19(1), 192–212. [CrossRef]
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28, 399–410. [CrossRef]
- Çivitci, A. (2014). Positive affection and self-esteem in college students: The moderating role of college satisfaction and college belonging. *Journal of Higher Education*, 4(2), 102–109. [CrossRef]

- Dalkılıç, S., Ata A. Ç., Dalkılıç, E., & Aytaç, A. İ. (2022) Kariyer Planlama Dersinin Kariyer Kararı Verme Yetkinliğine Etkisi: Lisans Öğrencileri Üzerine Bir Araştırma. *Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 24(3): 935-960. [CrossRef]
- Değirmenci Öz, S., & Yıldız, G. (2019). Hemşirelik öğrencilerinin mesleki benlik saygıları ve öğrenimlerine ilişkin doyum düzeylerinin belirlenmesi. *Sağlık ve Hemşirelik Yönetimi Dergisi*, 2 (6), 79-89.
- Demir, V., Gürsoy, F., & Ada, Ş. (2011). Okulöncesi öğretmen adaylarının mesleki benlik saygılarının incelenmesi. *Gaziantep Üniversitesi Sosyal Bilimler Dergisi*, 10(1), 597-614.
- Dinçer, F., & Öztunç, G. (2009). Hemşirelik ve ebelik öğrencilerinin benlik saygısı ve atılganlık düzeyleri. *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi*, 16(2), 22-33.
- Efiltili, E., & Çıkkılı, Y. (2017) Özel eğitim bölümü öğrencilerinin benlik saygısı ile mesleki benlik saygısının incelenmesi. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 17(1), 99-114. [CrossRef]
- Fırat Kılıç, H. (2018). Hemşirelik öğrencilerinin eğitim stresi ve mesleki benlik saygısı arasındaki ilişki. *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi*, 5(1), 49-59. [CrossRef]
- Gökdeniz, İ., & Merdan, E. (2011) Kişilik ile kariyer seçimi arasındaki ilişkinin incelenmesi. *Aksaray Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 3(2), 23-36.
- Kahraman, İ., & Fırat Kılıç, H. (2021). Hemşirelik öğrencilerinin mesleki benlik saygısı ve etkileyen faktörler. *Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 5(1), 1-12. [CrossRef]
- Karakoç, K., Karabulut, M., Kartal, E., & Mujdecı, B. (2022) Audiology students' opinions towards covid-19 pandemic: occupational perspective and future expectations. *Balance and Communication*, 20(2), 72-78. [CrossRef]
- Kartal, A., Meral, M., Çetinkaya, Ü. C., & Terlemez, Ş. (2022) Odyoloji öğrencilerinin mesleğe karşı tutumlarında pandemi sürecinin etkisi: kesitsel çalışma. *İnönü Üniversitesi Sağlık Hizmetleri Meslek Yüksek Okulu Dergisi*, 10(2), 616-626. [CrossRef]
- Körükçü, Ö., & Oğuz, V. (2011) Okul öncesi eğitimi öğretmen adaylarının mesleki benlik saygıları. *Kuramsal Eğitimbilim*, 4(2), 77-85.
- Kutlu, M., & Soğukpınar, E. (2015) Rehber öğretmenlerin benlik saygısı ile mesleki benlik saygısı düzeylerinin çeşitli değişkenler açısından incelenmesi/ examination of self-esteem and professional self-esteem levels of guidance teachers in terms of some variables. *E-uluslararası Eğitim Araştırmaları Dergisi*, 6(1), 84-101. [CrossRef]
- Kuzgun, Y. (2011) Meslek rehberliği ve danışmanlığına giriş. Nobel Yayıncılık. p. 2. [CrossRef]
- Lee, C. M. (2007) Career maturity, career decision-making self-efficacy, interdependent self-construal, locus of control and gender role ideology of Chinese adolescents in Hong Kong. Doctoral Dissertation.
- Lent, R. W., Brown, S. D., & Hackett, G. (2002) Social cognitive career theory. In Brown, D. (Ed). *Career Choice and Development*, (pp. 255-311). John Wiley & Sons.
- Öztuna, D., Elhan, A. H., & Kurşun, N. (2008) Sağlık Araştırmalarında Kullanılan İlişki Katsayıları. *Türkiye Klinikleri Journal Medical Sciences*, 28, 160-165.
- Özkan, H. B., & Yiğit, Ö. (2022) Odyoloji'de öğretime yönelik duyuşsal farkındalık: öğrenci bakış açısı. *Hacettepe University Faculty of Health Sciences Journal*, 9(1), 1-12.
- Savickas, M. L. (2002). Career construction: a developmental theory of vocational behavior. In Brown, D. (Ed.). *Career Choice and Development* (pp. 149-205). John Wiley & Sons.
- Şener, D. K., Karaca, A., Açıkgöz, F., & Süzer, F. (2011) Hemşirelik eğitimi mesleki benlik saygısını değiştirir mi? Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi, 1(3), 12-16.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior*, 22, 63-81. [CrossRef]
- Tuna, H. (2021) Fizyoterapi ve rehabilitasyon öğrencilerinin benlik saygıları ile etkinlik katılımları ve memnuniyetleri arasındaki ilişki. *Yükseköğretim ve Bilim Dergisi*, 11(3), 437-443. [CrossRef]
- Turan, F. D. (2021). Hemşirelik dördüncü sınıf öğrencilerinin beyin göçüne yönelik tutumlarının yordayıcısı olarak kariyer karar verme ve kariyer karar verme yetkinlikleri. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*, 10(4), 828-841 [CrossRef]
- Ulaş Kılıç, Ö. (2018) Üniversite son sınıf öğrencilerinin kariyer kararı verme yetkinliği düzeylerini etkileyen değişkenler. *Opus International Journal of Society Researches*. 9(16): 248-75. [CrossRef]
- Ulaş, Ö., & Yıldırım, İ. (2016) Kariyer kararı verme yetkinliği ölçeği'nin geliştirilmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 6(45): 77-90.
- Ziebell, C., & Louise, J. (2010) Promoting viable career choice goals through career decision making self-efficacy and career maturity in inner-city high school students: a test of social cognitive career theory. Doctoral Dissertation. [CrossRef]