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Health sciences undergraduate students' perceived meaning of life and their coping styles

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Abstract

Purpose: The aim of this study is to determine health sciences undergraduate students' perceived meaning of life and coping styles and the correlation between them.

Design and Methods: This is a descriptive study. The study sample consisted of 1160 students. Data were collected using a personal information form, the personal meaning profile (PMP), and the ways of coping inventory (WCI).

Findings: Participants had the highest mean scores on PMP relationship and intimacy subscales while they had the highest and lowest mean scores on WCI self-confident coping style and submissive coping style subscales, respectively.

Practice Implications: It is thought that the study will guide us in the process of vocational training of students or guidance and counseling services provided to them.

KEYWORDS

coping, health sciences students, meaning of life

1 | INTRODUCTION

College life is a transition period from adolescence to adulthood in which students establish self-identity and prepare for adult life. College students, who are at a critical stage of identity development, move away from home and enter into a dynamic developmental process by meeting new people and establishing different relationships. They learn about ideologies, alternative lifestyles, and professional life, and associate new knowledge with their previous knowledge. This combination enables them to develop original identities, set goals, and give meaning to life.¹⁻⁷

The existentialist philosopher Victor E. Frankl, the founder of logotherapy, states that every individual's life has a unique meaning.⁸ People give meaning to life by making sense of painful and sweet experiences, and most importantly, by searching for meaning itself.^{8,9} According to existentialism, if people do not search for meaning and if they do not have goals, values, and ideals, they end up feeling anxiety, which can cause isolation, feeling of emptiness, depression, suicidal thoughts, substance abuse, and so forth.^{2,8-11} College life is a time when students try to make sense of life and set goals, values, and ideals for themselves,⁵ which is the basis of a harmonious, healthy, happy, and productive life.^{2,8,9,12}

The most important factor affecting people's reactions is the meaning they give to life. People organize and respond to environmental stimuli by defining them in patterns such as coping behaviors.^{2,12} Coping refers to a variety of cognitions and behaviors used to solve problems to minimize or eliminate stress and conflict.¹³⁻¹⁵ The past and present meaning of problems and the purpose of life in general play a role in the development of those cognitions and behaviors.^{2,12} The fact that people ascribe meaning to problems they face also plays a key role in the development of coping styles.^{9,16,17}

Halama and Bakosova² reported that college students with high perceived meaning of life scores focus on solving problems while those with low scores tend to avoid problems, indicating that perceived meaning of life has an effect on coping styles. Although there are some Turkish studies investigating the meaning of life and coping styles separately, there are no studies, to our knowledge, that address these two concepts together.

Prospective health students experience health, disease, and death, which makes them reflect on the meaning of life and coping styles. Therefore, their perceived meaning of life and coping styles can guide the vocational training and guidance and counseling services provided to them.

2 | METHODS

2.1 | Objectives

The aim of this study is to determine health sciences undergraduate students' perceived meaning of life and coping styles and the correlation between the two concepts.

This study sought answers to the following questions.

- 1. What are health sciences students' perceived meaning of life?
- 2. What are health sciences students' coping styles?
- 3. What kind of relationship is there between health sciences students' perceived meaning of life and coping styles?
- 4. Do personal characteristics have an effect on health sciences students' perceived meaning of life and coping styles?

2.2 | Type of research

This descriptive study was conducted to determine health sciences undergraduate students' perceived meaning of life and coping styles and the correlation between the two.

2.3 | Participant

The study population consisted of 6155 students of the Institute of Health Sciences of Hacettepe University in the 2017-2018 academic year. The SPSS v.20 was used to perform power analysis on 60 students' data to determine the sample size. The result showed that a sample size of 1160 would be sufficient for the power of $\beta = 0.95$ ($\alpha = 0.05$). The number of students in faculties was also taken into consideration to ensure homogeneous distribution (Table 1). Participation in the study was voluntary.

TABLE 1 Distribution of health sciences students by faculties

The characteristics of the sample group are as follows. The mean age of the participants was 20.74 ± 1.85 years. 33.4% of the participants were medical students and 26% were physiotherapy students. Of participants, 22.6% were first graders, 77.3% were women, 57.6% had neutral income (income equals expenses), 95.9% were unemployed, and 30% lived with their parents. 84.6% lived in nuclear families, and the parents of 89.5% were alive and together. 35.3% of the participants had a mother with a primary school degree, 70.4% had an unemployed mother, 48.5% had a father with a higher education degree, and 70.2% had an employed father. 77.5% of the participants defined their family relationship as "good," 8% had a chronic disease, 3.2% were on psychiatric medication, 12.3% were smokers, 16.6% used alcohol and 0.9% used volatile substance, 66% were engaged in physical activity, 41.1% did internship, and 73.2% chose their major freely.

2.4 | Data collection tools

2.4.1 | Personal characteristics form

Developed by the researcher based on the literature review, the personal characteristics form is a 22-item form assessing sociodemographic characteristics (age, gender, faculty, parents' education status) that might affect perceived meaning of life and coping styles.^{11,18-22}

2.4.2 | Personal meaning profile

Developed by Wong (1998), the personal meaning profile (PMP) is a 57-item Likert-type scale designed to assess people's perceptions of personal meaning in their lives. The scale has 7 subscales and the items are rated on a seven-point scale, ranging from 1 (not at all) to 7

Faculties	Number of first graders	Number of second graders	Number of third graders	Number of fourth graders	Number of fifth graders	Number of sixth graders	Total
Faculty of Nursing	35	38	40	40	-	-	155
Faculty of Pharmacy	31	30	29	22	31	-	142
Medical School	51	40	40	51	43	30	255
Faculty of Dentistry	50	45	40	40	45	-	220
Faculty of Health Sciences							
Department of Nutrition and Dietetics	20	22	20	18	-	-	80
Department of Child Development	20	21	20	20	-	-	81
Speech and Language Therapy Department	9	8	6	9	-	-	32
Department of Occupational Therapy	9	12	12	12	-	-	45
Department of Physiotherapy	25	28	30	18	-	-	101
Audiology Department	13	12	12	13	-	-	50
Total	263	256	249	243	119	30	1160

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(a great deal). The subscales are achievement, relationship, religion, self-transcendence, self-acceptance, intimacy, and fair treatment/ perceived justice. The scale has no reverse-scored items, cutoff score, or total score. The higher the score, the better the quality of the meaning of life. The more the number of subscales with high scores, the wider the quality of the meaning of life.²³ The Cronbach's α coefficient of the PMP is .94 while those of its subscales; achievement relationship, religion, self-transcendence, self-acceptance, intimacy, and fair treatment/perceived justice, are .92, .91, .82, .79, .75, .64, and .63, respectively.

2.4.3 | Ways of coping inventory

Developed by Folkman and Lazarus (1985), the ways of coping inventory (WCI) was adapted to the Turkish language, and its validity and reliability were established by Şahin and Durak.²⁴ It is a 30-item scale rated on a four-point Likert-type scale (0 = not used, 1 = used somewhat, 2 = used quite a bit, and 3 = used a great deal). Items 1 and 9 are reverse scored. The scale consists of two groups and 5 subscales: (a) self-confident, (b) optimistic, (c) seeking of social support, (d) helpless, and (e) submissive coping styles. The first three styles are considered effective coping styles while the last two are considered emotion-oriented coping styles. There is no total score. The total score of each subscale is divided by the number of items of that subscale. The higher the score, the more often that style is used. Subscales with high scores, the wider the quality of the meaning of life.²³ The Cronbach's α coefficient of the WCI is .73 while those of its subscales; self-confident, helpless, submissive, optimistic and seeking of social support coping styles, are .83, .73, .55, .72, and .65, respectively.

2.5 | Data analysis

Data were analyzed using the Statistical Package for Social Sciences (SPSS: IBM), version 20 at a significance level of 0.05. Frequency tables and descriptive statistics were used for analysis.

Analysis of variance test (*F*-table value) was used to compare three or more independent groups when the data were normally distributed. Parametric methods were presented as mean ± SD.

The Mann-Whitney *U* test (*Z*-table value) was used to compare two independent groups when the data were not normally distributed. Kruskal-Wallis H test (*Z*-table value) was used to compare three or more independent groups. Bonferroni correction was used for pairwise comparisons of variables with significant differences. Nonparametric methods were presented as median (min-max).

The Spearman correlation coefficient was used to analyze the correlation between the perceived meaning of life and coping styles when the data were not normally distributed.

3 | RESULTS

3.1 | Distributions of PMP and WCI scores

Participants had the highest and lowest mean scores on the PMP intimacy (5.65 ± 0.94) and fair treatment (4.82 ± 0.98) subscales,

respectively, indicating that they mostly use the relationships and intimacy subscales as a source to make meaning of life while they use fair treatment and self-transcendence subscales the least (Table 2).

Participants had the highest and lowest mean scores on the WCI self-confident coping style (2.20 ± 0.48) and submissive coping style (1.22 ± 0.48) subscales, indicating that they use self-confident coping style the most and submissive coping style the least as a coping strategy for stress (Table 2).

3.2 | Correlation between PMP and WCI

The PMP achievement and PMP relationship were positively and moderately correlated with the WCI self-confident coping style (P < .05). The PMP achievement, religion, self-acceptance, intimacy, and fair treatment were positively and weakly correlated with the WCI optimistic coping style (P < .05). The PMP achievement was positively and very weakly correlated with the WCI social support (P < .05). PMP achievement, religion, self-acceptance, self-transcendence, intimacy, fair treatment, and relationship were negatively and weakly correlated with the WCI helpless and submissive coping styles (P < .05). The PMP relationship was positively and weakly correlated with the PMP religion, selfacceptance, fair treatment, WCI self-confident, and seeking of social support coping style (P < .05). The PMP relationship was positively and very weakly correlated with the WCI optimistic coping style (P < .05). The PMP self-acceptance was positively and weakly correlated with the PMP fair treatment, WCI selfconfident, and optimistic coping styles (P < .05). The PMP intimacy was positively and weakly correlated with the PMP fair treatment, WCI self-confident, optimistic, and seeking of social support coping styles (P < .05) (Table 3).

TABLE 2 Distributions of PMP and WCI subscale scores	TABLE 2	Distributions	of PMP	and WCI	subscale scores
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Scales (n = 1160)		Mean ± SD	Median (min-max)
Personal meaning	Achievement	5.18 ± 0.90	5.3 (1.4-7.0)
profile	Relationships	5.63 ± 0.75	5.7 (2.6-7.0)
	Religion	5.40 ± 1.32	5.8 (1.0-7.0)
	Self-transcendence	4.99 ± 0.92	5.1 (2.0-7.0)
	Self-acceptance	5.09 ± 0.84	5.2 (1.8-7.0)
	Intimacy	5.65 ± 0.94	5.8 (2.0-7.0)
	Fair treatment	4.82 ± 0.98	4.8 (1.0-7.0)
Strategies of	Self-confident	2.20 ± 0.48	2.1 (0.1-3.0)
coping with stress	Helpless coping style	1.65 ± 0.55	1.6 (0.0-3.0)
	Submissive	1.22 ± 0.48	1.2 (0.0-3.0)
	Optimistic	1.93 ± 0.57	2.0 (0.0-3.0)
	Seeking of social support	1.88 ± 0.61	2.0 (0.0-3.0)

		Persona	Dersonal meaning profile	e nrofile		0				Wave of co	Wave of coning inventory			
			22											
						Self-	Self-		Fair	Self-	Helpless			Seeking of social
Correlation [*] (n = 1160)	(n = 1160)	Achievement		Relationships F	Religion	transcendence	acceptance	Intimacy	treatment	confident	coping style	Submissive	Optimistic	support
Personal	Achievement	r 1.000	0.	0.546 (0.292	0.729	0.454	0.421	0.388	0.558	-0.309	-0.314	0.293	0.220
meaning		. д	Õ.	. 000.	000.	000.	000.	000	000	000	000	000	000	0.000
	Relationships	r #	1.	1.000 (0.322	0.547	0.446	0.576	0.324	0.324	-0.144	-0.153	0.235	0.289
		Р			000	000.	000.	000	000	000	000.	000	000.	000
	Religion	r #	#		1.000	0.511	0.309	0.225	0.308	0.146	0.028	0.184	0.141	0.108
		Р				000.	000.	000	000	000	.337	000	000.	000
	Self-	r #	#	Ŧ	#	1.000	0.461	0.398	0.421	0.421	-0.175	-0.115	0.305	0.171
	transcendence	Р					000.	000	000	000	000	000.	000	000
	Self-acceptance	r #	#	Ŧ	#	#	1.000	0.502	0.395	0.337	-0.207	-0.023	0.306	0.186
		Р						000	000	000	000	.434	000.	000
	Intimacy	r #	#		#	#	#	1.000	0.393	0.283	-0.253	-0.168	0.261	0.345
		Р							000.	000.	000	000.	000.	.000
	Fair treatment	r #	#		#	#	#	#	1.000	0.258	-0.164	-0.055	0.235	0.221
		Р								000	000	.062	000.	000
Ways of	Self-confident	r #	#		#	#	#	#	#	1.000	-0.338	-0.262	0.580	0.208
coping inventorv		Р									000	000	000	.000
	Helpless coping	r #	#	Ŧ	#	#	#	#	#	#	1.000	0.429	-0.356	-0.063
	style	Р										.000	000.	.031
	Submissive	r #	#	Ŧ	#	#	#	#	#	#	#	1.000	-0.043	-0.130
		Р											.146	.000
	Optimistic	r #	#	Ŧ	#	#	#	#	#	#	#	#	1.000	0.150
		Р												.000
	Seeking of social	# .	#		#	#	#	#	#	#	#	#	#	1.000
	auppoint	Р												

TABLE 3 Correlation between personal meaning profile and ways of coping invent

3.3 | Distribution of PMP and WCI by personal characteristics

The personal characteristics of the participants were faculty, grade level, gender, age, marital status, economic level, employment status, place of residence, parental status, family type, parents' education and employment status, family relationship, engaging in activities, internship status, free choice of major, chronic disease, psychiatric drug use, smoking, and alcohol and volatile substance abuse.

Participants' PMP subscale mean scores differed by grade levels, gender, age, internship status, economic status, engagement in physical activity, family relationship, parents' marital status, smoking, and alcohol use (P < .05).

According to Bonferroni correction, the fourth graders had significantly higher achievement subscale mean score than the second and third graders ($\chi^2 = 13042$; P = .023). The second graders had significantly higher relationship subscale mean score than the fourth graders ($\chi^2 = 13670$; P = .018). The fourth graders had significantly higher self-acceptance subscale mean score than the first graders ($\chi^2 = 15566$; P = .000).

Female participants had significantly higher relationship (*Z* = -2701; *P* = .007), religion (*Z* = -4223; *P* = .000), and intimacy (*Z* = -2810; *P* = .005) subscale mean scores than the male participants. Participants under the age of 18 years had significantly lower religion (χ^2 = 10.713; *P* = .013) and self-acceptance (χ^2 = 16.255; *P* = .001) subscale mean scores than those aged 19 to 20 and 21 to 22 years. Participants with positive income (income > expenses) had significantly higher achievement subscale mean score (χ^2 = 9045; *P* = .011) than those with negative income (income < expenses). Participants with negative income (acception (χ^2 = 10.004; *P* = .007), and fair treatment (χ^2 = 35.436; *P* = .000) subscale mean scores than those with negative and neutral income.

Participants engaged in physical activity had significantly higher achievement (Z = -6913; P = .000), relationship (Z = -3279; P = .001), religion (Z = -2557; P = .011), self-transcendence (Z = -3539; P = .000), intimacy (Z = -4467; P = .000), and fair treatment (Z = -3012; P = .003) mean scores than those not engaged in physical activity.

Participants whose parents were together had significantly higher religion ($\chi^2 = 27430$; P = .000), intimacy ($\chi^2 = 17850$; P = .000), and fair treatment ($\chi^2 = 10.040$; P = .018) mean scores than those with divorced parents and those with only one parent alive. Participants who had a bad relationship with their family had significantly lower achievement ($\chi^2 = 22124$; P = .000), relationship ($\chi^2 = 40.360$; P = .000) self-transcendence ($\chi^2 = 43889$; P = .000), selfacceptance ($\chi^2 = 16357$; P = .001), intimacy ($\chi^2 = 136694$; P = .000), and fair treatment ($\chi^2 = 47396$; P = .000) mean scores than the others. Participants who did internship had significantly higher achievement (Z = -2183; P = .029), relationship (Z = -2229; P = .026), self-transcendence (Z = -2001; P = .045), self-acceptance (Z = -2529; P = .011) mean scores than those who did not.

Participants who were on psychiatric medication had significantly lower achievement (Z = -2672; P = .008), intimacy (Z = -2569;

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P = .010), and fair treatment (*Z* = -2107; *P* = .035) mean scores than those who were not. Participants who smoked cigarettes had significantly lower religion (*Z* = -6892; *P* = .000), self-transcendence (*Z* = -3726; *P* = .000), and fair treatment (*Z* = -2264; *P* = .024) mean scores than those who did not. Participants who used alcohol had significantly lower religion (*Z* = -14 094; *P* = .000), self-transcendence (*Z* = -4741; *P* = .000), and self-acceptance (*Z* = -2938; *P* = .003) mean scores than those who did not.

Participants' WCI subscale mean scores differed by gender, age, economic status, employment status, activity, family relationship, psychiatric medication use, smoking, and alcohol use (P < .05).

According to Bonferroni correction, male participants had significantly higher self-confident (Z = -1.976; P = .048) and optimistic coping style (Z = -2096; P = .036) subscale mean scores than female participants while the latter had significantly higher helpless coping style (Z = -3892; P = .000), submissive coping style (Z = -4019; P = .000), and seeking of social support (Z = -4002; P = .000) subscale mean scores than the former. Participants under the age of 18 years had significantly lower submissive coping style ($\chi^2 = 10.818$; P = .013) subscale mean score than those aged 19 to 20, 21 to 22, and ≥ 23 age groups.

Participants with negative income had significantly higher helpless coping style ($\chi^2 = 8385$; P = .015) mean score than those with positive income while the latter had significantly lower submissive coping style ($\chi^2 = 11.359$; P = .003) mean score than the former. Participants engaged in physical activity had significantly higher selfconfident (Z = -4799; P = .000), optimistic (Z = -4349; P = .000), and seeking of social support (Z = -3072; P = .002) mean scores and lower helpless coping style (Z = -4409; P = .000) and submissive coping style (Z = -6147; P = .000) mean scores than those not engaged in physical activity. Participants who had a good relationship with their family had significantly higher optimistic ($\chi^2 = 11.669$; P = .009) and seeking of social support ($\chi^2 = 18516$; P = .000) coping style mean scores than those who had a bad relationship with their family.

Participants who were on medication had significantly higher self-confident coping style (Z = -2380; P = .017) and optimistic coping style (Z = -2470; P = .013) mean scores than those who were not. Participants who did not smoke cigarettes had significantly higher helpless coping style mean score than those who did (Z = -3722; P = .000). Participants who did not use alcohol had significantly higher helpless coping style (Z = -2593; P = .010) and submissive coping style (Z = -4775; P = .000) mean scores than those who did.

4 | DISCUSSION

This is the first study to investigate the meaning of life and coping styles in this age group in Turkey. We believe that the results will shed light on the relationship between the meaning of life and coping styles of university students and people in this age group. The results will be discussed in four subsections.

4.1 | Participants' perception of personal meaning and coping styles

Participants mostly use the relationship and intimacy subscales as sources of making meaning of life, indicating that they mostly resort to relationships and intimacy followed by religion, achievement, selfacceptance, self-transcendence, and fair treatment. This might be due to the fact that college life is a time when students make new and different interactions and give importance to human relations. Making meaning of life through religion is another common phenomenon.²⁵ Schnitker et al²⁶ also reported that university students with a high global meaning experience more religious transformation. Achievement is a role and responsibility that university students are expected to undertake, and therefore, it is another resource that is commonly resorted to. It is used more often than self-acceptance and self-transcendence styles because it concerns what students expect from being a university student. Moreover, self-acceptance and self-transcendence styles are the result of experience and maturation throughout the university vears.²⁷ Therefore, it is seen that different meaning sources are used in different life periods when making sense of life.

Participants use the self-confident coping style the most, which is considered an effective coping style, followed by the optimistic and seeking of social support coping styles. They use the submissive coping style the least. This result indicates that participants use effective coping styles. Similar to our result, Ergin et al²⁸ reported that medical students use the self-confident coping style. Research shows that college students use the self-confident coping style in general.^{3,24,29-31} These results might be due to the fact that students discover their individual resources and take steps to become an individual throughout university years. However, some students have high helpless coping style scores, which might be due to some personality traits that lead them to resort to the helpless coping style.

4.2 | Relationship between personal meaning of life and coping styles

Participants who make meaning of life through achievement mostly use the self-confident coping style and resort to approaches based on themselves and their own achievement to solve problems. Participants who accept themselves for who they are and believe in the presence of fair treatment mostly use the self-confident and optimistic coping styles, indicating that holding a worldview of justice promotes optimism.³² Making meaning of life through relationships encourages participants to adopt an optimistic approach in their coping and make them more likely to seek social support.

No matter what method participants use to make meaning of life, they do not resort to the helpless or submissive coping style for stress. Pulopulos and Kozusznik³³ investigated the correlation between perceived stress and meaning of life and reported that people with low meaning of life have high cortisol levels. Park and Baumeister³⁴ discussed some studies showing a relationship between the perceived meaning of life and stress levels. According to our results, when participants use any resources to make meaning of life, they do not feel helpless and do not adopt a submissive approach to deal with stress.

4.3 | Students' perceived meaning of life based on personal characteristics

The way participants make meaning of life is affected by gender, family relationship, parents' marital status, smoking and alcohol use, engagement in physical activity, grade levels, and internship status, which has also been reported by previous studies.^{18,22,35,36} Our result and the literature indicate that personal characteristics affect people's perceived meaning of life.

Female participants make more use of the relationship, religion, and intimacy sources than male participants, suggesting that gender is as important as some other variables in the way people make meaning of life. Gürhan³⁷ argues that gender and religion are two important factors affecting each other and that religious practices mostly address women and influence their position in society. This study conducted in Turkish culture highlights that religious practices are mostly attributed to women, which affects their position in society. Religion is frequently used to make meaning of life and affects gender, and therefore, women use it to make meaning of life more than men. Besides, female participants establish close relationships socially and emotionally, and this way, make sense of life more than male participants, and therefore, attach more importance to social and emotional relationships than male ones to make meaning of life.

Participants who have a bad relationship with their family use all sources of meaning-making of life less than others. Besides, participants whose parents are together make meaning of life through religion and intimacy more than others while those with divorced parents have lower fair treatment subscale scores. The approaches adopted in the family affect the individual's self-perception and life in many ways, either positively or negatively.³⁸ Our result also suggests that family relationships have a strong effect on participants' perceived meaning of life. Although there are no studies showing that meaning of life is learned in the family, positive or negative attitudes definitely affect the perception of meaning.³⁹ On the other hand, participants who have a bad relationship with their family or have divorced parents are at risk of problems that may arise from their inability to make meaning of life.

There is a significant difference in sources of making meaning of life between smokers and alcohol drinkers and nonusers. Some studies report that addictive substance use negatively correlates with perceived meaningfulness of life.^{1,25,36} Research shows an inverse relationship between substance use and inability to make meaning of life, although whether it is correlation or causation is still up for debate.⁴⁰ Moreover, participants who are engaged in physical activity make use of more resources to make meaning of life. Participants who do not use addictive substances and are engaged in

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physical activity more use more methods to make meaning of life, attach more importance to human relations, and focus more on improving their selves. These results indicate that healthy living habits and different activity programs should be promoted to encourage students to make meaning of life and to prevent problems that may arise from inability to do that.

Fourth graders place more emphasis on achievement when making meaning of life and use achievement as a source in their perceptions of personal meaning. However, second graders use relationships more than fourth graders to make meaning of life. As also reported in the literature, this might be due to the fact that fourth graders think more about finding a job after graduation and have more concern for their future, and therefore, they make meaning of life through achievement more. On the other hand, second graders adapt to college life and make new friends, and therefore, make meaning of life through relationships more.^{3,41} Fourth graders. This result suggests that students know themselves better, have a better understanding of influences affecting them, and define themselves in a more coherent manner throughout university years.

Participants who do internship use the achievement, relationship, self-transcendence, and self-acceptance sources more than those who do not, suggesting that doing internship affects students' perceptions of life, relationships, achievement, and self.^{42,43} Mollica and Hyman⁴⁴ reported that doing an internship positively affects the socialization and professional self-formation of nursing students. Putting knowledge into practice and influencing and being influenced by people who need their help affect students' perceived meaning of life. In this way, they are exposed to new and different life experiences, which expand their meaning-making sources.

4.4 | Coping styles according to personal characteristics

The personal characteristics affecting participants' coping styles are gender, family relationship, economic status, smoking-drinking, activity engagement, age, and conscious choice of major. Savcı and Aysan²⁹ reported that gender, major, socioeconomic status, perceived stress, and grade level affect students' styles of coping with stress. Kaya et al⁴⁵ also reported that age, gender, income level, and parents' education level affect medical students' styles of coping with stress. Personal characteristics affect the way students perceive and assess stress, and therefore, play a key role in the way they formulate coping styles.

Participants' coping styles differ by gender. Male participants use the self-confident and optimistic coping styles while female participants use the submissive, helpless, and seeking of social support coping styles. This result is similar to those reported by previous studies.^{5,24,46-50} Kaya et al⁴⁵ reported that male students use active coping more than female students while Savci and Aysan²⁹ reported that perceived stress is higher in female students than in male students, which might be due to the differences in the way men and women are raised and societal roles they are expected to play.⁵¹

Most participants with negative income and a bad relationship with their family use effective coping styles less often than others. This shows that students who do not have family support do not seek social support to cope and determine their coping styles using the approaches taught by their parents. Some studies show that students with rural backgrounds and low perceived social support have worse problem-solving skills and more symptoms of depression.^{52,53} Therefore, these variables are risk factors that hinder the ability to choose effective coping methods.

Smokers and alcohol drinkers resort to the submissive and helpless coping styles less often than nonusers. No such result had been reported in the literature before. Perhaps, smokers and alcohol drinkers do not need to resort to the helpless and submissive coping styles, thanks to their personality traits and social circles. People of this age group also tend to smoke and consume alcohol due to peer pressure and social acceptance.^{54,55}

Participants engaged in physical activity use effective coping styles more often than those not engaged in physical activity. This result suggests that students engaged in physical activity interact more with people and perceive problems more differently and manage coping processes more effectively. Research also shows that there is a positive relationship between activity and well-being and that activity reduces symptoms of depression in adolescents.^{56,57}

Participants under the age of 18 years use the submissive coping style less often than other age groups, suggesting that the younger the university students, the more likely they are to use effective coping styles. Moreover, doing an internship has no effect on participants' coping styles, indicating that theoretical and practical training does not help students develop new coping styles and that they resort to the submissive coping style more often as they get older and receive more education. However, our results are in contrast with those of Habibov et al,⁵⁸ who reported that university education facilitates active coping styles. Nevertheless, students should be supported to develop effective coping styles.

Participants who did not choose their major consciously mostly resort to the helpless coping style while those who chose their major consciously mostly use the self-confident, optimistic, and seeking of social support coping styles. There are some studies that point to a relationship between career choice and personality traits.⁵⁹ Participants who do not act according to their choices do not use active coping methods, which may also be related to their personality traits.

5 | IMPLICATIONS FOR NURSING PRACTICE

The existence of the resources utilized by students to understanding and creating meaning in life makes life meaningful and guides students in dealing with problems. The acquisition of more sources for students and the use of more subdimensions while making sense of life will contribute to the personal and professional development ILEY-Perspectives in PSYCHIATRIC CARE

of the students and the care they will give to the patients. Therefore, their perceived meaning of life and coping styles can guide the vocational training and guidance and counseling services provided to them.

6 | CONCLUSION

The personal characteristics affect participants' perceived meaning of life and coping styles. Participants believe in intimacy and relationships the most and in fair treatment the least when they make meaning of life. They resort to the submissive coping style the least and the self-confident coping style the most for stress. When they use meaning-making sources, they refrain from resorting to the helpless or submissive coping style.

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