



| Article Type Research | Received Date 17.08.2019 | Accepted Date 16.12.2020 | | |
|--------------------------|---------------------------------|---------------------------------|--|--|
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Abstract

This descriptive study was conducted to identify the motivation levels of university students, factors affecting their motivation, and students' opinions concerning their professions. The study sample consisted of 211 students attending the Vocational School of Health Services. Data were assembled using a "Questionnaire Form" and the "Motivation Sources and Problems Scale". Frequency, percentage, arithmetic mean values, and the chi-square, independent group Student t-test, Mann Whitney U, ANOVA, and Kruskal Wallis tests were used for data analysis. Students' mean scores were 41.06 ± 7.17 on the intrinsic motivation sub-dimension, 20.27 ± 3.15 on the extrinsic motivation sub-dimension, and 25.08 ± 6.76 on the negative motivation sub-dimension, with a mean overall score of 86.41 ± 12.73 . It is found that 91.5% of students had chosen their profession of their own volition and that 66.4% regarded their profession as important. In conclusion, students' intrinsic and extrinsic motivation levels were high, while negative motivation was low. Helping others, ease of finding employment, and selecting their professions of their own volition affect students' professional motivation. Students also thought that the working hours were not excessively demanding and wished to engage in their professions after graduation.

Keywords: Education, professional motivation, students' motivation, vocational higher school.

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Öğrencilerin Mesleki Motivasyon Düzeyleri, Motivasyonlarını Etkileyen Faktörler ve Mesleklerine İlişkin Görüşleri: Sağlık Hizmetleri Meslek Yüksekokulu Örneği

| Makale Türü | Başvuru Tarihi | Kabul Tarihi |
|-------------|----------------|--------------|
| Arastırma | 17.08.2019 | 16.12.2020 |

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Öz

Bu araştırma, üniversite öğrencilerinin mesleki güdülenme düzeylerini, mesleklerine ilişkin görüşlerini ve güdülenmeyi etkileyen faktörleri belirlemek amacıyla tanımlayıcı olarak yapılmıştır. Araştırmanın örneklemini Sağlık Hizmetleri Meslek Yüksekokulu'nda öğrenim gören 211 birey oluşturmaktadır. Veriler "Soru Formu" ve "Güdülenme Kaynakları ve Sorunları Ölçeği" kullanılarak toplanmıştır. Verilerin analizinde frekans, yüzde, aritmetik ortalama, ki kare, bağımsız grup t-testi, Mann Whitney U, ANOVA, and Kruskal Wallis testleri kullanılmıştır. Öğrencilerin içsel güdülenme alt boyutundan alınan puan ortalamasının 41.06 ± 7.17 , dışsal güdülenme alt boyutundan alınan puan ortalamasının 25.08 ± 6.76 ve toplam puan ortalamasının 86.41 ± 12.73 olduğu saptandı. Öğrencilerin önemli olduğunu düşündüğü saptanmıştır. Öğrencilerinin içsel ve dışsal güdülenme düzeylerinin yüksek, olumsuz güdülenmenin düşük olduğu bulunmuştur. Başkalarına yardım etmek, iş bulma kolaylığı ve mesleklerini kendi iradelerine göre seçmek öğrencilerin mesleki motivasyonunu etkilemektedir. Ayrıca öğrenciler çalışma saatlerinin aşırı derecede zorlanmadığını düşünmekte ve mezuniyet sonrası mesleklerini yapmak istemektedirler.

Anahtar Sözcükler: Eğitim, mesleki motivasyon, öğrenci motivasyonu, meslek yüksek okulu.

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Introduction

Education is the process of making changes in the behavior of an individual in a desired direction in accordance with a specific purpose. Education constitutes the basic element in the awareness and development of society (Koç, 2008). The acquisition of a profession constitutes a process based on knowledge, skills, and rules acquired through a specific education process and that affects the quality of life (Önler and Saracoglu, 2010). Motivation is one of the most influential concepts in this process (Civci, 2012). Motive and motivation are different concepts. The motive is regarded as a common factor encapsulating requests, demands, interests, and drives, while the incentive is defined as a force that motivates, directs, and maintains goal-oriented behavior. Motivation plays an important role in educational activities which assume the function of shaping human behaviors. It is also a prerequisite during individuals' learning processes. Various accounts, concepts, and theories have been proposed in connection with motivation (Acat and Köşgeroğlu, 2006; Gayef and Sarıkaya, 2012). The development of the concept of motivation has followed a linear course from behaviorism to cognitivism in parallel with theories of learning from the 1930s to the present. Theories accounting for motivation from an instinctual perspective maintain that sources of motivation derive directly from birth and bear inherited characteristics (Gürdoğan, 2012). In addition, motivation essentially helps individuals to be successful and to achieve personal satisfaction (Yıldırım Orhan, 2006). Previous studies show that motivation affects education and the learning process (Gayef and Sarıkaya, 2012). The motivation of students is an important issue in higher education, particularly owing to the importance of academic performance in their professional lives. The importance of motivating students to learn and succeed is generally overlooked in educational curricula. However, student motivation is an essential factor shaping attitudes toward learning. Previous studies have investigated the association between student motivation and academic performance, and various definitions of student motivation have been employed (Afzal, Ali, Aslam Khan and Hamid, 2010). In addition, there is a powerful link between students' motivation to learn and the development of academic concepts a powerful, and student motivation can be a useful impulse in learning (Van De Gaer, Fraine, Pustjens, Damme, Munter and Onghena, 2009; Karaman Özlü, Gümüş, Güngörmüş, Avşar and Özer, 2014). Under the theory developed by Deci and Ryan, motivation in the field of education is considered at three levels - intrinsic motivation, extrinsic motivation, and negative motivation (Ryan and Deci, 2000; Şenel, 2014).

Intrinsic motivation refers to motivation (interest, curiosity, knowing, understanding, need, sufficiency, etc.) deriving from the individual. Extrinsic motivation originates from factors outside the individual, such as the work environment. It is usually applied by another individual, the motivator, to the motivated subject, using a number of tools (reward, punishment, coercion, requests, etc.). Negative motivation refers to the absence of motivation in situations in which individuals are unable to establish a connection between their actions and the outcomes of those actions (Ryan and Deci, 2000; Eskimez, Öztunç and Alparslan, 2008). The most important of these three sources of motivation is intrinsic motivation, which provides continuous and effective motivation in learning. Extrinsic motivation, therefore, needs to be converted into intrinsic motivation for motivation to be more effective (Ryan and Deci, 2000).

It is very important that all healthcare professionals receive high-quality and effective training in order to meet the changing healthcare needs of society. Healthcare professionals are among the most important members of the team providing healthcare services. Determining the motivation levels of students during their education will have a significant impact on their educational lives and thus on their professional achievement. Improving education will help to produce healthcare professionals who are highly motivated in their professional lives (Acat and Köşgeroğlu, 2006; Çelik, 2014).

In that context, this study was planned to examine the motivation levels, factors affecting motivation, and opinions concerning their professions of students at the Vocational School of Health Services.

Answers were sought to the following research questions:

- 1) What are the motivation levels of university students?
- 2) What are the factors affecting their motivation?
- 3) What opinions do students hold concerning their profession?

Method

Research Design and Sample

The purpose of this descriptive research was to determine the professional motivation levels and the factors affecting those levels of university students. The study was conducted in the fall semester of the 2018-2019 academic year at the Vocational School of Health Services of a public university in the Eastern Black Sea region of Turkey. The study population consisted of 327 first- and second-year students at the Vocational School of Health Services (studying Medical Laboratory Techniques, Secretariat of Medical Documentation and Medical Imaging Techniques, and First and Emergency Aid programs under the Department of Medical Services and Techniques). We aimed to include the entire population without selecting a sample. The study included students aged 18 years or older, capable of speaking Turkish and agreeing to participate. It was finally completed with 211 students, with 34 students being excluded due to absence, 25 being sick, 23 failing to answer the questions, 29 being unwilling to participate, and five participating in the pre-questionnaire process. The participation rate was 64.5%.

Research Instruments

A Questionnaire Form and the Motivation Resources and Problems Scale were used for data collection.

Questionnaire Form: This form produced by the researchers consisted of six questions investigating students' socio-demographic characteristics. It also contained nine questions aimed at eliciting students' opinions about their profession. The content validity of the form produced on the basis of the previous literature was determined. This was evaluated by five experts in the field of vocational health services, and the form was revised in line with their opinions. In determining the applicability of the form, it was pre-applied to five students. Two items were added after the pre-application to elicit students' ideas about their future professions. The students involved in the pre-application were not included in the rest of the study.

Motivation Resources and Problems Scale: This scale was developed by Acat and Köşgeroglu in 2006. It consists of 24 items in three sub-dimensions-"Intrinsic Motivation", Extrinsic Motivation" and "Negative Motivation". Eleven of these items (nos. 1,2,3,4,6, 7,8,9,10,23, and 24) are intended to determine intrinsic motivation, five (nos. 13,14,15,17, and 20) to determine extrinsic motivation and eight (nos. 5,11,12,16,18,19,21, and 22) to determine negative motivation. The items constituting the intrinsic and extrinsic motivation subscales are scored totally disagree: 1, disagree: 2, undecided: 3, agree: 4, and totally disagree: 5. The items constituting the negative motivation subscale are scored totally disagree: 5, disagree: 4, undecided: 3, agree: 2, and totally agree: 1. Possible total scores range from 24 to 120. The score distribution is 11-55 for intrinsic motivation, 5-25 for extrinsic motivation, and 8-40 for negative motivation. Higher score indicates higher motivation levels. The total score of the items was reversed when calculating the negative motivation subscale. The Cronbach alpha values of the scale are 0.84 for intrinsic motivation, 0.68 for extrinsic motivation, 0.69 for negative motivation, and 0.82 for total motivation. In the present study, Cronbach alpha values were 0.89 for intrinsic motivation, 0.84 for extrinsic motivation, 0.86 for negative motivation, and 0.88 for total motivation.

Data Collection

The study data were collected using the face-to-face interview method. The form and the scale were distributed to students by the author in the classroom setting. The form took approximately 15 minutes to complete. Student names were not included on the forms. In order to reach the entire study population, the form was applied on four occasions (to medical imaging program students on Monday, medical documentation and secretariat department students on Tuesday, medical laboratory program students on Wednesday, and first and emergency aid program students on Friday) and was made available to all students.

Data Analysis

Statistical Package for the Social Sciences version 22.0 was used for coding and statistical analysis of the study data. Descriptive statistics were expressed as mean, minimum, maximum, number, and percentage values. The normality of the sample means of the scores was verified using the Kolmogorov Smirnov test The Chi-square, independent group Student t, Mann Whitney U, ANOVA, and Kruskal Wallis tests were used for data analysis. Results were evaluated with a 95.0% confidence interval and p <0.05 significance.

Limitations

The principal limitation of this study is that only the Vocational School of Health Services students were included. The results, therefore, apply only to Vocational School of Health Services students, and cannot be generalized to all students. In addition, the students may have been influenced by one another since the questionnaire was not applied to all participants on the same day. The fact that the study data were collected by students' instructors may also have affected the reliability of the data.

Ethical Statements

The study was conducted with due regard to human rights and work ethics. Official permission was obtained from the Directorate of Vocational School of Health Services. All students who agreed to participate in the study provided signed informed consent forms once the purpose of the study had been explained. The study conformed to the principles of the Declaration of Helsinki.

Results

| Features | | n | % |
|------------------------------|----------------------|-----|------|
| Candar | Female | 160 | 75.8 |
| Gender | Male | 51 | 14.2 |
| Program* | MIT | 93 | 44.1 |
| | MLT | 66 | 31.3 |
| | SMD | 49 | 23.2 |
| | FEA | 3 | 1.4 |
| Class | 1st-year students | 158 | 74.9 |
| | 2nd-year students | 53 | 25.1 |
| Paternal Education Status | Primary School | 117 | 55.5 |
| | High School | 65 | 30.8 |
| | University | 18 | 8.5 |
| | Literate/ Illiterate | 11 | 5.2 |
| Maternal Education Status | Primary School | 147 | 69.7 |
| | High School | 32 | 15.2 |
| | Literate/ Illiterate | 24 | 11.3 |
| | University | 8 | 3.8 |
| Selection of | By the student | 193 | 91.5 |
| profession | By the family | 18 | 8.5 |

Table 1

* MIT: Medical Imaging Techniques, MLT: Medical Laboratory Techniques, SMD: Secretariat of Medical Documentation, FEA: First and Emergency Aid

Women constituted 75.8% of the participants, 44.1% were MIT students, and 74.9% were in their first year. In addition, 57.8% of the participants reported equality between income and expenses, the fathers of 55.5% and the mothers of 69.7% were primary school graduates, and 91.5% of students stated that they had chosen their future professions of their own volition.

In terms of the reasons for selecting their future professions (n=193) among those who chose their programs of their own volition, 52.1% cited good employment opportunities, 30.3% cited a desire to help others, and 17.6% cited low university entrance score requirements (not included in the table).

Table 2

| Motivation resources and problems scale scores | | | | |
|--|-------------------|------------------|--|--|
| | Mean ± SS | Min-Max (Median) | | |
| Intrinsic Motivation | 41.06 ± 7.17 | 15-55 (42.0) | | |
| Extrinsic Motivation | 20.27 ± 3.15 | 8-25 (20.0) | | |
| Negative Motivation | $25.08 \pm 6,76$ | 8-40 (24.0) | | |
| Total Scale Score | 86.41 ± 12.73 | 34-120 (87.0) | | |

Mean scores were 41.06 ± 7.17 from the intrinsic motivation subscale, 20.27 ± 3.15 from the extrinsic motivation subscale, 25.08 ± 6.76 from the negative motivation subscale, and 86.41 ± 12.73 from the total Motivation Sources and Problems Scale (Table 2).

Table 3

Comparison of motivation levels of students in terms of some socio-demographic characteristics

| | Intrinsic Matimatian | Extrinsic Motivation | Negative Motivation |
|--|-------------------------|-------------------------|------------------------|
| | Motivation | | 1.100.100 |
| | Mean±SD | Mean±SD | Mean±SD |
| Female | 41.03±7.43 | 20.42±3.22 | 24.63±6.80 |
| Male | 41.13±6.37 | 19.82 ± 2.91 | 26.49±6.51 |
| Statistical Analysis | U=4007.000 | U=3359.500 | U=4641.000 |
| | p=0.847 | p=0.053 | p=0.139 |
| 1 st -year students | 41.35±7.36 | 20.52±3.17 | 24.86±6.87 |
| 2 nd -year students | 40.18±6.57 | 19.50±2.99 | 25.73±6.46 |
| Statistical Analysis | U=3659.000 | U=3280.000 | U=3780.500 |
| | p=0.169 | p=0.016 | p=0.290 |
| Selection of profession by the student | 41.56±6.88 | 20.34±3.16 | 25.00±6.79 |
| Profession elected by the family | 35.61±8.14 | 19.50±3.05 | 26.00±6.62 |
| Statistical Analysis | U=974.000 | U=1297.500 | U=1847.000 |
| | P=0.002 | P=0.071 | P=0.656 |

* FEA: First and Emergency Aid, SMD: Secretariat of Medical Documentation, MIT: Medical Imaging Techniques, MLT: Medical Laboratory Techniques

Table 3 shows students' sources of motivation in terms of socio-demographic characteristics. Firstyear students had higher extrinsic motivation scores, and the difference between the two years was also significant (p = 0.016). The mean intrinsic motivation score of students who selected their professions of their own volition was 41.56 ± 6.88 compared to 35.61 ± 8.14 for those whose professions were decided by the family. There was a statistically significant difference between the groups in terms of and intrinsic motivation (P=0.002). The students who selected their professions of their own volition had higher intrinsic motivation scores.

| Reasons | Yes | No | t | n |
|-----------------------|-------------|-------------|---------|--------|
| | Mean ± SS | Mean ± SS | · | Р |
| Helping People | 90.75±12.21 | 84.53±12.52 | t=3.34 | p=0.00 |
| Ease of finding a job | 88.15±13.48 | 84.52±1.63 | t=2.08 | p=0.03 |
| University entrance | 83.51±11.98 | 87.03±12.3 | t=-1.53 | p=0.12 |
| score | | | | |

 Table 4

 Comparison of students' motivation levels in terms of reasons for selecting their professions

In terms of reasons for selecting their future professions, helping others and good employment opportunities exerted a statistically significant effect on professional motivation (p < 0.05) (Table 4).

Although not included in the tables, analysis showed that 90.0% stated that the working hours were not excessively demanding, 89.1% regarded their professions as acceptable in terms of status, 87.7% described those professions as well suited to their own characters, and 66.4% of students considered their professions important. Women found their future professions significantly more tiring than men (p=0.02). Examination of participants' desires to enter their professions after graduation revealed that 71.6% wished to work in their professions, 20.9% were undecided, and 7.6% did not wish to.

Discussion, Conclusion, and Recommendations

Students' willingness to learn is important for achieving the goals set in education and for quality education. Learning is closely related to motivation, because motivation forces the organism to react in a certain way, and consequently to learn. This study investigated motivation levels, factors affecting motivation, and opinions concerning their professions among vocational health school students in terms of a number of variables.

Students trained at the Vocational School of Health Services had high intrinsic and extrinsic motivation levels and low levels of negative motivation. Sources of intrinsic motivation have been reported to provide more effective and continuous motivation in learning. In addition, a high level of intrinsic motivation among students bestows a high quality on both the education process and professional life (Gayef and Sarıkaya, 2012). By the findings of a study, Gayef and Sarıkaya (2012) found that students exhibited high intrinsic and extrinsic motivation levels and low negative motivation levels. The high motivation levels observed in the present study, in agreement with the previous literature, suggest that the educational process is positively affected.

Second-year students had lower extrinsic motivation scores than first-year students. Güllerci and Oflaz (2010) also reported lower levels of extrinsic motivation in second-year ambulance and emergency care technician students than in first-year students. Gençay and Gençay (2007) also reported higher mean extrinsic motivation levels among first-year students than those in their fourth year. In this context, students at the Vocational School of Healthcare Services receive clinical training from the first semester. Instructors give students one-to-one feedback in the clinical setting in order to improve their skills. This interaction between students and instructors in the first semester may have increased students' extrinsic motivation. Additionally, this time-dependent decrease in extrinsic motivation suggests that students are not supported by extrinsic factors and are not sufficiently motivated after the first semester.

Our findings suggest that the majority of students also selected their departments of their own volition. Such students in the present study had higher intrinsic motivation levels. Consistent with the present research, another study of students at the Health Sciences Faculty also reported that students who selected their own departments were better motivated (Bilgin and Ocakçı, 2011). Conscious and voluntary selection of one's own profession is one of the most important determinants of professional motivation (Özdemir Özkan, Akın and Durna, 2015). The present study is compatible with the previous literature from that perspective. In addition, no significant difference relationship between the genders and mean motivation subscale scores. Taşpınar et al. also determined no significant gender variation in intrinsic and extrinsic motivation levels may be regarded as a positive phenomenon preventing professional sexual discrimination.

Professional motivation increases with the prestige of the profession concerned, the salary it attracts, interest in the profession and scientific matters, the opportunity to help other people, and a high sense of altruism (Crossley, 2002). In the present study, helping other people and good employment opportunities were identified among the reasons why students selected their future professions and also exerted a significant effect on professional motivation. Similarly, in their study of high school students, Iflazoglu and Tumkaya (2008) showed that concern for and a desire to help others was the most important reason for students selecting a career in nursing (İflazoğlu and Tümkaya, 2008). Similar studies conducted with healthcare professionals have reported good employment opportunities as the main reason for a voluntary profession (Özpancar, Aydın and Akansel 2008; Kızğut and Ergöl, 2011; Özlü, Gümüş, Güngörmüş, Avşar and Özer, 2014). Our results are consistent with these previous findings. Özpancar et al. (2008) also described job security and university entrance exam scores as the most important reasons for choosing a career in nursing (Özpancar, Aydın and Akansel 2008).

The great majority of students in the present study regarded their professions as acceptable in terms of working hours and status and as well suited to their own characters. In addition, more than half of students regarded their professions as important. Another study involving students at a health sciences faculty reported similar findings in terms of students' opinions regarding their professions to those of the present research. That study also reported that half of the students desired to engage in their professions after graduation, while almost half were undecided (Köksal and Yurttaş, 2015). The findings from the present study were consistent with the previous literature. It may therefore be concluded that the majority of students regard their professions as well suited to them both personally and in societal terms.

The majority of students in the present study regarded their professions as important. Besides, analysis revealed that the majority of students wished to enter their professions after graduation. It may therefore be concluded that students make their choices in a conscious manner and that this is related to high levels of motivation.

The present study determined that students had high levels of intrinsic and extrinsic motivation, and low negative motivation levels. Factors such as helping others, easy employment opportunities, and having selected their professions of their own volition all affected students' professional motivation. Students considered that working hours were not excessively demanding and that their professions were acceptable in terms of status and well suited to their own characters. Students also wished to enter their professions after graduating. We, therefore, recommend that students participate in the learning process through an education system based on professional motivation and that the selection of their profession is left to students themselves.

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