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Abstract

Academic motivation are claimed to be influencing factors on college students' various outcomes. The aim of this study is to compare the academic motivation and career decidedness of university students based on the variables of gender, year of study, academic achievement and expectations for pursuing graduate education. 376 students at Karatay, Selçuk and Necmettin Erbakan University participated in the study. Academic motivation and career decidedness scales were used to collect the data. The findings showed that the academic motivation and career decidedness of university students differed based on the variables of gender, year of study, academic achievement and expectations for pursing graduate education. In addition, it was found that university students' academic motivation had a positive effect on their career decidedness. Considering the findings of this study, it could be beneficial to pay attention to increasing motivation in university education and to include factors that encourage academic and intrinsic motivation among students.

Introduction

University life encompasses a wide area that includes academic, administrative and human relations. The main input of the academic dimension of these fields is the student. Students are entitled to study at university after a tough race in Turkey. One of the most important goals of young people today is to enter a university. The aim of the students entering the university is to graduate successfully and to realize their career expectations by being motivated and satisfied in their department. The level of meeting students' expectations is closely related to both their competencies in their career and their motivation. Thus, those who attend university education should keep their motivation and career expectations high. This will also make it easier to achieve their goals. Motivation is a stimulus that encourages and energizes people to do certain activities and has physiological, cognitive and affective dimensions (Abu Karsh, 2018; Akinbadewa & Sofowora, 2020; Al-Husban, 2020; Basarmak & Hamutoglu, 2020; Benek & Akcay, 2019; Dweck, 1986; Hamid, Salleh, & Laxman, 2020; Kim et al., 2019; Rogayan Jr, 2019; Suren & Kandemir, 2020; Turunen, 2019). It is seen that making students have positive affective characteristics in today's school settings can eliminate almost 1 in 4 of the variance, which is the measure of the difference in learning levels (Sünbül, 2004; Yılmaz & Sünbül, 2002). Correll (1992), in his article examining affective factors in learning, states that learning cannot be explained solely based on cognitive processes. While emphasizing the importance of active participation in learning for learners to develop the best

solutions to problems, he points out the importance of motivation in this whole process. Correll (1992) listed the characteristics of students' motivation, active and voluntary participation in learning process as follows:

- The feeling of connecting the student's personal life with new information,
- Students' sense of perceiving themselves as a learner,
- Feeling about the ability to use knowledge,
- The expectation of success and the sense of determination to improve learning.

Motivation is one of the most important sources of power that determines the direction, intensity and determination of student behavior in learning-teaching process. Motivation is both an attractive and a hindering subject. It is interesting because it is behind almost everything a person does (Gottfried, 1990). Motivation has been widely studied in education and in other fields. Motivation is a complex psychological phenomenon; therefore, the absence of one major overarching definition or theory of motivation should not be surprising (Collins & Amabile, 1999; Gokbel & Alqurashi, 2018; Isaksen, Treffinger, & Dorval, 2011; Kara, 2020; Keskin, Akcay, & Kapici, 2020; Zimmerman, 2008). Researchers have explored motivation from various theoretical perspectives, such as behavioral (Skinner, 1978), social (Bandura, 1997), cognitive, and humanistic standpoints. There are different levels (low to high) and types (intrinsic, extrinsic, and amotivation) of motivation. Intrinsic motivation refers to a desire to engage in a task derived from individual's interest or pure pleasure, whereas extrinsic motivation refers that individuals engage in tasks due to external reinforcements or rewards, such as wealth, power, fame, and popularity (Alan, 2019; Trevino & DeFreitas, 2014). Moreover, according to SDT, academic engagement is a manifestation of academic motivation in terms of participation in learning activities or academic tasks, which is influenced by to what extent students perceive that academic activities meet their psychological needs. Motivated, especially intrinsically, students tend to engage in such activities that satisfy their needs (Sünbül, Kesici, & Bozgeyikli, 2003a).

Learning theorists acknowledge the positive effects of students' interest in, wishes about learning on their success in learning process. The variables that enable students to engage in learning with interest and enthusiasm could be explained by two concepts called "learning motivation" and "academic motivation" (Anderman & Midgley, 1997; Eccles & Roeser, 2009). Academic motivation is defined by a student's desire (as reflected in approach, persistence, and level of interest) regarding academic subjects when the student's competence is judged against a standard of performance or excellence (McClelland, et al., 1953; Omiles et al., 2019; Olowo et al., 2020; Serhan, 2019). Academic motivation is a broad term incorporating many concepts studied by scholars to include self-efficacy, determination, resilience, etc. (Alharthi, 2020; Altakhyneh & Abumusa, 2020; Cayvaz, Akcay, & Kapici, 2020; Finogenow, 2017).

Past research has linked academic motivation with a number of desirable outcomes such as academic achievement (Bozgeyikli et al., 2003; Paulsen & Feldman, 1999), academic engagement (Panitz, 1999; Sünbül, Kesici, & Bozgeyikli, 2003b), greater success coping with stress (Struthers, Perry, & Menec, 2000), better study skills (Perdana, Jumadi, & Rosana, 2019; Robbins et al., 2004; Syafii, Kusnawan, & Syukroni, 2020), adoption of self-regulated learning strategies (Zimmerman & Schunk, 2012) and persistence (Porchea et al., 2010). The literature has also identified a corollary to academic motivation: grit (Duckworth, et al., 2007). Grit is an internal

passion and persistence to accomplish long-term goals, and involves "working strenuously toward challenges, maintaining effort and interest over years despite failure, adversity, and plateaus in progress" (Duckworth et al., 2007).

Academic motivation and engagement are claimed to be influencing factors on college students' various outcomes (Allen et al., 2008; Chen & Lu, 2015; Roksa & Whitley, 2017; Trolian et al., 2016). Academic motivation is defined as the students' desire or interest in engaging with learning and their school experience (Hulleman, et al., 2016). Research has consistently found that academically motivated students tend to perceive school and learning as valuable, like to learn, and enjoy learning-related activities (Eccles & Wigfield, 2002; Larsen & Puck, 2020; Zimmerman, 2000, 2008). Studies have identified lack of motivation as a primary reason for underachievement (Scheel, Madabhushi, & Backhaus, 2009; Wigfield, Lutz, & Wagner, 2005).

It is expected that a student who wants to move to a better status than his/her status will have a higher motivation in academic settings. Therefore, it is expected that students who are at the center of education and training activities will reach a better status in their profession, that is, their achievement and motivation in their careers will increase. Highly motivated students are expected to make more effort to increase their academic and social achievement in their learning process. Thus, it is desirable for students to have a high career and academic motivation in terms of university education.

Career can be seen as a professional process that a person makes and develops initially by spending the majority of productive years in his life and generally begins with education and continues until the end of his working life. In this sense, a person's career means not only his/her job, but also his/her education in order to realize his/her expectations, goals, feelings and desires regarding the job role assigned to him/her in the teaching process and in the workplace, and thus progress with his/her knowledge, skills, abilities and desire to work (Leung, 2008; Leung, Hou, & Li, 2011). Career refers to the devotion of a person to a specialization or the gradual progress of a person in his/her job and the degree of achievement in life (Stahl & Björkman, 2006).

Career choice is one of the most important tasks that make up the transition from school to further education or work. The last few years at university are particularly important in this regard, as it is the time when a young person faces the challenge of exploring more career opportunities, evaluating different alternatives, and ultimately making a decision (Savickas & Porfeli, 2012). In the process of career construction, the individuals' tendencies with regard to their careers are important. In addition to these tendencies, an individual's career goals, attitude, decidedness, and psychological response to future are also important. Career decidedness includes the individual's career goals (Carson & Bedeian, 1994).

Osipow (1999) defined career decision as thought processes in which an individual integrates personal knowledge and professional knowledge to reach a career choice. In fact, career decision is a complex process involving a series of processes and many stages or situations. Career decidedness, on the other hand, expresses the individual's decidedness about his/her career choice and satisfaction with this choice (Miller, 2011). The concept of career decidedness is based on Lent, Brown and Hackett (1994) Social Cognitive Career Theory

which took Bandura's (1996) Social Cognitive Theory as basis. According to the theory, individual and environmental factors determine the decision about career. The individual has the power to build and develop their own career. However, it is stated that this power is not absolute, and that the individual's decision is influenced by the environmental factors and the context in which the decision is made.

"Career decidedness" which refers to an individual's degree of confidence in pursuing a particular career direction (Restubog, Florentino, & Garcia, 2010), has become an increasingly important employment and academic future issue for college students (Gordon, 1998; Restubog, Florentino, & Garcia, 2010). Studies reveal that those who make decisions about their career more determinedly are more likely to gain longer-term employment and meaningful career opportunities in their chosen professional field (Hirschi, 2011). It was found that students who have strong career decidedness and academic motivation have high life satisfaction (Restubog, Florentino, & Garcia, 2010).

According to Kelly (2009), the interaction of cognitive, motivational environmental factors during the process of career is of great importance. Kelly (2009) focuses on three variables based on Bandura's Social Learning Theory. These are individual's perception and expectation of competence in his/her job, personal goals and expectations regarding the results of the job. It is stated that the complexity of making decisions about career increases with increasing age (Gati & Saka, 2001). As individuals get older, career choices are influenced and shaped by their own developmental stages, current environmental conditions and internal dynamics (Howard & Walsh, 2011). During the course of the career process, two factors, internal and external, can be mentioned that direct the individual. Internal factors include emotions, thoughts, achievements, psychological power, self-realization, taking responsibility, participation, status and fields of interest. External factors include social background, family, environment, education and socio-economic phenomena of the individual contribute to the formation of internal reactions and motivations. All these affect individuals internally and externally and guide individuals' career decisions (Avram, Burtaverde & Zanfirescu, 2019; Day & Allen, 2004).

A review of the related literature reveals that there was a significant relationship among university students' career expectation, decidedness, motivation and achievement. Lent, Brown and Larkin, (1984) and Peterson and Delmas (2001) found significant relationships between academic achievement, motivation, and career expectations. In addition, Jenkins (2004), Nauta (2007), Hawkins (2004) and Ulaş-Kılıç (2018) found significant relationships between academic motivation and career determination. In the literature, Parker, Bindl and Strauss (2010) argue that proactive motivation is important in individuals' academic career and performance. However, there are very few studies that address how academic motivation affects career management behavior and career decidedness among university students, and with which variables such effects occur. Therefore, this study aimed to determine university students' academic motivation and career decidedness based on gender (demographic), class and academic (related to school) and expectations for pursing graduate education with a relational approach. Answers to the following questions were sought in the study:

1. What is the level of participants' academic motivation and career decidedness?
2. Is there a significant difference between participants' academic motivation and career decidedness based on gender?

3. Is there a significant difference between participants' academic motivation and career decidedness based on year of study?
4. Is there a significant difference between participants' academic motivation and career decidedness based on academic achievement?
5. Is there a significant difference between participants' academic motivation and career decidedness based on expectations for pursing graduate education?
6. Does participants' academic motivation significantly affect their career decidedness?

Method

This research was carried out in a correlational-comparative survey design. This research model aims to examine the subject under study by comparing at least two groups that differ on the subject. The subject and event studied in this research design emerged independently without researcher's interference and manipulations (Bryman, 2006; Kertzer, 1997). With the help of the correlational-comparative survey design, the academic motivation and career decidedness of university students were compared based on the variables of gender, year of study, academic achievement and expectations of pursuing graduate education.

Participants

Students studying at Karatay, Selçuk and Necmettin Erbakan University constitute the participants of this research. Since, reaching all the students in the target universe requires serious time and teamwork, convenience sampling method was used. Thus, 376 students studying at Karatay, Selçuk and Necmettin Erbakan University were randomly selected and participated in the study. Participation in the study was voluntary. Demographic variables and the distribution of participants according to these variables are shown in Table 1.

Table 1. Distribution of Students of Visual Arts Education Based on Demographic Characteristics

		F	%
University	Karatay University	62	16,49
	Necmettin Erbakan University	146	38,83
	Selçuk University	170	45,21
Gender	Female	167	44,41
	Male	208	55,32
Year of Study	1	119	31,65
	2	105	27,93
	3	79	21,01
	4	73	19,41
Academic Achievement	High	44	11,70
	Medium	277	73,67
	Low	55	14,63
	Total	376	100,0

When the table is examined, the distribution of students was as follows; 16.49% at Karatay University, 38.83% at Necmettin Erbakan University and 45.21% at Selçuk University. 55.32% of the students is male and 44.41% of them are female students. Regarding the year of study, 31.65% of them are first year, 27.93% are second year, 21.01% are third year and 19.41% are fourth year students. In academic terms, 11.7% of the students have high academic achievement, 73.67% have medium academic achievement and 14.63% of them have low academic achievement.

Data Collection Tools

Academic Motivation Scale

The Academic Motivation Scale developed by Bozanoğlu (2004) was used to examine the academic motivation levels of university students. The scale consists of 20 items in Likert type. The higher the score obtained on the 5-point scale, the higher the academic motivation will be. The results of the factor analysis performed to determine the construct validity of the Academic Motivation Scale reveal that the scale consists of 3 subscales called self-transcendence, use of knowledge and exploration. In addition, the total score is obtained from the scale. The reliability of the scale, realized by Bozanoğlu (2004), was calculated with the Cronbach Alpha coefficient and was .83. In the analysis performed on the sample data of this study, Cronbach's Alpha coefficient of the scale was .85.

Career Decidedness Scale

In this study, the measurement tool developed by Lounsbury, Hutchens and Loveland (2005) and adapted to Turkish by Akcakanat and Uzunbacak (2019) was used to measure the career decidedness among university students. The construct validity of the scale was later assessed by Akcakanat and Uzunbacak (2019) and Lounsbury, Hutchens and Loveland (2005). The scale consists of 6 items and is one-dimensional. The study uses a 5-point Likert scale (1=Strongly disagree, 5=Strongly agree). The higher scores on the scale show higher career decidedness. Cronbach's Alpha was calculated as .95 by Lounsbury, Hutchens and Loveland (2005). In the following studies, it was found .90 and above. In this study, Cronbach's Alpha reliability coefficient of career decidedness scale was .94.

Data Analysis

In the study, before analyzing the academic motivation and career decidedness scores, the distribution of the data was examined. In determining the distribution, skewness and kurtosis values were taken as basis. According to Tabachnick and Fidell (2007), the fact that the values in the range of ± 1 indicates that the data do not deviate from the normal distribution. The values found in this study indicated that academic motivation and career decidedness scores were normally distributed. Thus, parametric tests were used to analyze academic motivation and career decidedness scores. The data were analyzed using Independent Samples t-test, One Way ANOVA and Linear Regression techniques.

Findings

In this section, in accordance with the general purpose of the research, the findings obtained by comparing the scores obtained from the measurement tools based on the variables of gender, grade, academic achievement and the expectation of pursuing a graduate education are presented. Descriptive values of the scores obtained from measurement tools are presented before comparisons are made.

Table 2. Descriptive Values of Scores

Variables	N	Mean	Std. Deviation	Result
Academic Motivation	376	3.34	0.68	Medium
Career Decidedness	376	3.35	0.75	Medium

When Table 2 is examined, it is seen that the mean score of academic motivation was 3.34 (Sd=0.58). The mean score of career decidedness was 3.35±0.75. According to the mean values obtained, the academic motivation and career decidedness among the university students were medium.

Table 3. Comparison of Scores Based on Gender

Variables	Gender	N	Mean	Std. Deviation	t	p
Academic Motivation	Female	167	3.47	0.59	3.11	0.00
	Male	208	3.25	0.74		
Career Decidedness	Female	167	3.31	0.73	-0.59	0.55
	Male	208	3.36	0.76		

As shown in Table 3, no significant difference was found in students' mean scores of career decidedness based on gender ($p>0.05$). However, a significant difference was found in participants' mean scores of academic motivation. It was found that the female participants had significantly higher academic motivation than their male peers.

Table 4. Comparison of Scores Based on Year of Study

Variables	Year of Study	N	Mean	Std. Deviation	F	p	Scheffe T.
Academic Motivation	1. Year	119	3.20	0.68	3.53	0.02	4>1
	2. Year	105	3.33	0.75			3>1
	3. Year	79	3.45	0.56			
	4. Year	73	3.49	0.68			
Career Decidedness	1. Year	119	3.24	0.67	6.59	0.00	4>1
	2. Year	105	3.21	0.77			3>1
	3. Year	79	3.39	0.71			
	4. Year	73	3.66	0.80			

When Table 4 is examined, there is a significant difference between students' scores of academic motivation ($F(3.63)=3.28$; $p<0.05$) and career decidedness ($F(6.69)=5.56$; $p<0.05$) based on the year of study. According to the Sheffe test results, the academic motivation and career decidedness mean scores of the third and fourth year students are significantly higher than the mean scores of the first and second year students.

Table 5. Comparison of Scores Based on Academic Achievement

Variables	Academic Achievement	N	Mean	Std. Deviation	F	P	Scheffe T.
Academic Motivation	High	44	3.59	0.67	6.17	0.00	3>1
	Moderate	277	3.35	0.64			
	Low	55	3.12	0.81			
Career Decidedness	High	44	3.91	0.71	29.06	0.00	3>1
	Moderate	277	3.35	0.68			3>2
	Low	55	2.84	0.79			2>1

When Table 5 is examined, there is no significant difference in academic motivation and career decidedness scores based on the variable of academic achievement ($p>0.05$). According to the Scheffe test results, students with high academic achievement level had significantly higher mean scores of academic motivation than the students with low academic achievement. In terms of career decidedness, students with high academic achievement had higher mean scores than their peers with medium and low academic achievement. Similarly, students with moderate academic achievement had higher mean scores of career decidedness than students with low academic achievement.

Table 6. Comparison of Scores Based on the Expectations for Pursuing Graduate Education

Variables	Expectations for Pursuing Graduate Education	N	Mean	Std. Deviation	t	P
Academic	Yes	177	3.52	0.64	4.76	0.00
Motivation	No	199	3.19	0.68		
Career	Yes	177	3.45	0.76	2.52	0.01
Decidedness	No	199	3.25	0.73		

According to the table above, a significant difference was found in mean career decidedness and academic motivation scores of students based on their expectations for pursuing graduate education ($p<0.05$). It was found that the participants who had expectations for having a graduate education had significantly higher academic motivation and career decidedness than those who did not.

Table 7. Results of Regression Analysis Regarding the Effect of Academic Motivation on Career Decidedness

Variable	R	R^2	β	F	-p-
Academic Motivation	0.43	0.19	0.43	87.04	0

The dependent variable = Career Decidedness

When Table 7 is examined, it is seen that the regression model developed to determine the effect of academic motivation on career decidedness is significant (R=0.43; F=87.04; p<0.01). Approximately 19% of the change in career decidedness could be explained by academic motivation. Academic motivation had a positive and high effect on career decidedness (β=0.43; p<0.01).

Discussion

In this study, which investigated the academic motivation and career decidedness of university students, it was found that the academic motivation of the participants was at a moderate level. It was also found that female students have higher academic motivation than their male peers. These findings corroborate earlier findings of Asimaki and Vergidis (2013), Carvalho (2016), Duckworth et al. (2015), Khaola and Mahao (2019), Richardson and Watt (2007), Vallerand et al. (1992), Voyer and Voyer (2014). According to Carvalho (2016), gender differences and motivation to learn in participating in academic activities may stem from dissimilar patterns of academic and social expectations for males and females, despite the cultural norms in which men are more masculine and assertive than women. In this respect, many studies stated that women are more motivated for academic activities and exhibit more positive affective characteristics than men (Asimaki & Vergidis, 2013).

This study also showed that there are significant differences in academic motivation of university students based on the year of study. The academic motivation of third and fourth year students was significantly higher than the first and second year students. Similarly, university students with expectations for pursuing a graduate education had high levels of academic motivation. These findings are similar to those of Aung et al. (2015), Del-Ben et al. (2013), Eccles and Wigfield (2002) and Robbins, Lauver et al. (2004). According to Robbins et al. (2004), improvements in academic motivation can be facilitated over time by an effective learning-teaching intervention process. According to Del-Ben et al. (2013), this is because students who acquire appropriate cognitive skills over time during university years and motivate themselves enough to participate in self-regulated learning are more likely to see learning tasks as intrinsically stimulating and valuable, and as a result, have both high levels of self-efficacy and gain high academic motivation.

Another finding was related to the comparisons made on the academic motivation of university students based on their levels of academic achievement. It was found that students with high levels of academic achievement had more positive academic motivation compared to their peers with moderate and low success. Many studies support the findings of this study. In studies of Burton et al. (2006), Ryan and Deci (2020), Kriegbaum, Becker, and Spinath (2018), Litalien et al. (2019), Taylor et al. (2014), Vallerand and Bissonnette (1992), significantly strong relationships were found between academic motivation and performance and achievement. In general, various variable-centered analyzes conducted with university students and middle school students showed that in a learning environment that supports autonomy, autonomous motivation is positively associated with academic achievement, increased work continuity, and decreased school dropout (Burton et al., 2006; Vallerand & Bissonnette, 1992). A meta-analysis revealed that 16.6% of the variance in school achievement can be uniquely explained by academic motivation (Litalien et al., 2019; Taylor et al., 2014).

In addition, it was found that career decidedness of the participants was at a moderate level. However, there was no significant difference in career decidedness based on gender. These findings are similar to the research findings of Betz and Voyten (1997), Gloria and Hird (1999), Taylor and Popma (1990) and Ulaş (2016). In the study conducted by Gloria and Hird (1999), students who made a career decision showed that their career decision-making competence levels were higher than those who had not yet made a decision.

The study also revealed that there are significant differences in career decidedness of university students based on year of study, academic achievement and expectations for pursuing graduate education. Fourth and third year students had higher levels of career decidedness. In addition, students with high levels of academic achievement and expectations for pursuing graduate education had high career decidedness. These findings are similar to the results of the studies conducted by Day and Allen (2004), Fidan, Fidan and Öztürk (2018), Neice and Bradley (1979), Schunk and Zimmerman (2006). According to Schunk and Zimmerman (2006), the development of cognitive and psychomotor competencies of individuals affects self-efficacy. Thus, the development of awareness and competencies in the basic skills of the students in the senior classes enabled them to have higher career decidedness. According to Fidan, Fidan and Öztürk (2018), individuals' achievement levels during his/her education have an effect on his/her self-efficacy and expectations for profession, and this is the determinant of the choice of profession and career-related decisions by enabling individuals to set their goals. Ng et al. (2005) reported that training and skill development opportunities are positively correlated with performance, career expectancy and satisfaction. According to Day and Allen (2004), there is empirical evidence that those who are determined to be career-oriented with intrinsic motivation will achieve success in career. Moreover, individuals with strong academic motivation had higher career-related self-efficacy.

One of the last findings of the study is related to the relationship between academic motivation and career decidedness among university students. According to the results of the regression analysis, participants' academic motivation had a positive relationship with, and significant effect on their career decidedness. This finding corroborates the reports by Bassi et al. (2007), Bong (2005), Dwita and Widyarini (2019), Galleguillos and Olmedo (2017), Kusurkar, et al. (2013), Luo, Chau and Lam (2019), Restubog, Florentino and Garcia (2010), Salovaara (2005), Schunk and Pajares (2009), Sia (2010), Won, Anderman and Zimmerman (2020). Bassi et al. (2007) found that students with strong self-efficacy and motivation exhibited higher academic expectations, attitudes and career decidedness. It was stated that students with high career decidedness and academic motivation have high academic achievement and life satisfaction (Restubog, Florentino, & Garcia, 2010). Again et al., (1984) and Peterson and Delmas (2001), Nauta (2007), Hawkins (2004) and Ulaş-Kılıç (2018) found positive and significant relationships among academic achievement, motivation, career expectation and career decidedness.

Conclusions

This study, which investigated the academic motivation and career decidedness among university students, found that participants' academic motivation and career decidedness were at a moderate level. The analysis of the data showed that university students' academic motivation and career decidedness varied based on the

variables of gender, year of study, academic achievement and expectations for pursuing graduate education. According to the results of the regression analysis, university students' academic motivation had a positive and determining effect on their career decisions.

Based on the results of this research, some recommendations can be made for future research. The variables of academic motivation and career decidedness can be investigated in individuals with different cultural orientation or socio-economic level. In this study, the number of female students was less than male students. Thus, the relationship among gender variable, academic motivation and career decidedness can be re-examined with new studies which have more homogeneous distribution in terms of gender. Based on the results of this study, it can be argued that it may be necessary to develop programs that can be effective in increasing university students' academic motivation and career decision-making competence. Considering the findings of this study, it could be beneficial to pay attention to increasing motivation in university education and to include factors that encourage academic and intrinsic motivation among students.

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