

Art. # 1520, 11 pages, <https://doi.org/10.15700/saje.v37n4a1520>

The relationship between career decision-making self-efficacy and vocational outcome expectations of preservice special education teachers

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Social cognitive career theory, which is one of the most studied career approaches, recently proposed that self-efficacy and outcome expectations are important determinants of the career choice process. Career self-efficacy and vocational outcome expectations might both result in avoiding or having greater motivation levels in terms of career behaviours. These two factors are both crucial in career decision-making and performing career behaviour. This study aims to examine the relationship between career decision self-efficacy and vocational outcome expectations of preservice special education teachers in North Cyprus. This study is based on quantitative research method, and 156 preservice special education teachers participated in this research. Career Decision Self-Efficacy Scale and Vocational Outcome Expectations Scale were used to collect the data. The results were analysed with statistical analysis methods involving descriptive statistical analysis, *t*-test, chi-square, Kruskal-Wallis, correlation and regression. Age was found to be significantly related with career decision-making self-efficacy. Results also showed that there is a significant relationship between career decision-making self-efficacy, and vocational outcome expectancy. The results are discussed with reference to relevant literature and recommendations for further research and practices are also provided.

Keywords: career choice; career decision-making; preservice special education teachers; self-efficacy; vocational outcome expectations

Introduction

Career development is a fundamental aspect of human development, and it is considered an especially important dimension of psychosocial development (Eryilmaz & Mutlu, 2017; Yazici, 2009). “Career” as a term refers to a combination and synthesis of work roles an individual experiences during their lifespan (Super, 1980). A career choice involves the start of a specific job or working activity, whereas career development involves all the activities that take place during the course of a career (Baruch, Szucs & Gunz, 2015). Career development is regarded as a life-long process. A career is generally defined as a developmental process, which involves all an individual’s roles before commencing with a profession, during the course of a profession, and after retirement from a profession (Kuzgun, 2000).

There are many factors that play a crucial role in individuals’ career decision and outcome expectations (Li, Hazler & Trusty, 2017). Career decision-making self-efficacy and vocational outcome expectations are two of these factors. Self-efficacy beliefs involve psychological processes, which play an important role in acquiring or changing behaviours. These processes are also effective in personal competence expectancies (Bandura, 1986). Personal competence expectancy deals with beliefs of fulfilling a specific behaviour and achieving outcomes. Self-efficacy beliefs might be related to both past experiences, as well as expectancies for academic achievement in the future. Individuals with higher levels of self-efficacy beliefs tend to determine reliable aims and feel confident in being able to fulfil these aims. On the other hand, low self-efficacy beliefs might prevent a person from performing a task, while high self-efficacy beliefs might trigger a person to perform a career task (Komarraju & Nadler, 2013).

Many career theories have been proposed to understand the career development process and the career behaviours of individuals. Especially after the 1980s, the use of cognitive approaches in understanding career behaviours has increased. These cognitive approaches emphasise individuals’ active roles in their career development (Özden, 2014). One of the recent cognitive approaches used for career behaviours is the Social Cognitive Career Theory (SCCT). SCCT was firstly proposed by Lent, Brown and Hackett (1994) to understand career behaviours and developmental processes from a cognitive perspective. Lent et al. (1994) suggested a social cognitive framework to understand three aspects of career development, which included the development of career interests, selection of career options, and performance and permanence in educational and occupational work. This theory is based on the General Social Cognitive Theory proposed by Bandura (1986), which emphasises the complex interaction between people, behaviour and environment. According to Bandura’s theory, the SCCT focuses on human agency, as the capacities of individuals have from shaping their own career behaviour. In addition, this theory emphasises three individual variables, which are important in career development, namely self-efficacy beliefs, outcome expectations, and personal goals. SCCT argues that performance goals are considerably affected by individuals’ self-efficacy beliefs and outcome expectations. On the other hand, there is an interactive relationship between self-efficacy and outcome expectations. It is stated that focusing on goals in an effective manner might strengthen self-efficacy beliefs and outcome expectations in

a positive cycle (Lent, 2005). According to the literature, self-efficacy and outcome expectation concepts are generally addressed as career decision self-efficacy and vocational outcome expectation concepts, in studies based on SCCT in the area of career development (Gore & Leuwerke, 2000; Gushue, 2006; Lent, Ireland, Penn, Morris & Sappington, 2017; Sarı & Şahin, 2013).

In understanding career development from the perspective of SCCT, career decision self-efficacy is regarded as a crucial element in an individual's career interests, goals, choices, experiences and performances (Jo, Ra, Lee & Kim, 2016). Career decision is defined as making a choice for a profession, education programme, job or school (Doğan, 2014). Therefore, career decision self-efficacy refers to the confidence enacted when making effective career decisions and generating positive outcomes in relation to career development roles. These roles include competencies regarding accurate self-evaluation, collecting information about vocations, goal setting, planning and problem-solving (Betz, 2000). It is known that when teachers feel competent in these aspects, they are more likely to develop positive attitudes towards their careers (Ozcan & Genc, 2016; Uzunboylu, Hürsen, Özüttürk & Demirok, 2015).

Furthermore, the vocational outcome expectancy concept is defined as beliefs regarding long-term outcomes of an achievement (Betz & Voyten, 1997). In other words, vocational outcome expectancies denote individuals' expectancies related to the outcomes of their career choices. İşik (2013) stated that vocational outcome expectancy might be regarded as someone's beliefs regarding the possibilities of experiencing primary vocational values such as income, status, productivity and prestige. Some sample sentences of vocational outcome expectancies include: "the vocation that I choose will provide the income which I need", and "the vocation that I choose will support me to lead the life which I want to live." Therefore, career decision self-efficacy and vocational outcome expectations are important components of career development, choice and decision-making with regards to the SCCT.

The university years are an important developmental period, in which many changes are experienced in academic, social, personal, and occupational areas (Newman & Newman, 2017). Kuzgun (2000) has stated that university students experience a transition period in which they encounter making decisions, and they have future vocational outcome expectations. During their high school years, students experience the challenge of career decision-making, and there are many factors that affect their choice. Studies carried out in different countries imply that the challenge of career decision-making is a common issue of many different cultures. There are studies carried out in

different regions around the world that include students from Turkey (Kondakci, 2011), North Cyprus (Caliskan & Ozcan, 2017), as well as French and Korean students (Sovet & Metz, 2014). For instance, Shumba and Naong (2012) examined factors affecting the career choice of students in South Africa and showed that family and teacher factors play an important role in students' career decisions.

Preservice special education teacher refers to undergraduate students of a four-year Bachelor Degree Programme of special education. In North Cyprus, there is a growing labour trend in the area of special education, because of the increasing prevalence of individuals with special needs in the general population, and the need for qualified special education teachers. Preservice special education teachers need to have necessary skills for their profession. Special education teachers are required to be patient, empathetic, and have vocational competence (Allahverdiyev & Yucesoy, 2017; Ozcan & Gur, 2016). From the perspective of SCCT, career decision-making self-efficacies and vocational outcome expectations are important for a successful future career among special education teachers. The aim of this study is to examine the relationship between career decision self-efficacy and vocational outcome expectations of preservice special education teachers. When the literature is examined, it is evident that the number of studies examining this relationship among preservice special education teachers is limited. In other words, there is a gap in this field, especially in North Cyprus. The results of the study from North Cyprus would provide important implications for career counselling interventions in the world, by revealing the relationship between career decision-making self-efficacy and vocational outcome expectations. In this regard, this study is important to contribute to related fields in terms of research and practices such as career education and counselling, as fundamental concepts to career development (Enache & Matei, 2017). It is expected that this study would contribute to career education and counselling, in terms of connecting theory and practice in the field of career counselling. Since career decision-making self-efficacy and vocational outcome expectations are important factors for a successful professional life, it is important to understand the importance of these factors to develop and support students in their career decisions. Based on this general objective, this study aimed to answer the following questions:

- Do career decision-making self-efficacy beliefs of preservice special education teachers differ based on age, gender, department, class and socioeconomic status?
- Do vocational outcome expectations of preservice special education teachers differ based on age, gender, department, class and socioeconomic status?

- Is there a significant relationship between career decision-making self-efficacy and vocational outcome expectations of preservice special education teachers?
- Are career decision-making self-efficacy beliefs of preservice special education teachers significant predictors of their vocational outcome expectations?

Method

In this study, which aimed to examine the relationship between career decision-making self-efficacy and vocational outcome expectations of preservice special education teachers, a survey model was used as a descriptive method. The survey

model is a research method that aims to reveal and describe a specific situation (Karasar, 2006).

Participants

The sample included 156 volunteer preservice special education teachers studying in Teaching Individuals with Mental Retardation Department and Teaching Individuals with Hearing Impairment Department from Faculty of Education at a university in North Cyprus. Participants were selected based on a simple random sampling method and the demographic characteristics of the participants are shown in Table 1.

Table 1 Demographic characteristics of the participants

Demographic characteristics		f	%
Age	18–22	96	61.5
	23 and above	60	38.5
Gender	Total	156	100
	Male	89	57.1
	Female	67	42.9
Department	Total	156	100
	Teaching individuals with mental retardation	100	64.1
	Teaching the hearing impaired	56	35.9
Class	Total	156	100
	First year	6	3.8
	Second year	67	42.9
	Third year	59	37.8
	Fourth year	24	15.4
Socioeconomic Status	Total	156	100
	Low	6	3.8
	Middle	124	79.5
	High	26	16.7
	Total	156	100

Table 1 shows that 96 (61.5%) of the participants were between the ages of 18 and 22, 60 of whom (38.5%) were 23 and above. In addition to this, 89 (57.1%) of the participants were male, and 67 (42.9%) were female. A majority of the participants (64.1%) were studying in the Department of Teaching Individuals with Mental Retardation. Six of the participants (3.8%) were first year students, 67 (42.9%) were second year students, 59 (37.8%) were third year students, and 24 (15.4%) were fourth year students. Almost 80% of the participants indicated that their families have a middle-class socioeconomic status.

Instruments

A demographic information form, Career Decision Self-Efficacy Scale and *Vocational Outcome Expectation Scale* were used to collect the data of the study. The demographic information form included questions about age, gender, department, class and socioeconomic status of participants.

The Career-Decision Self-Efficacy Scale is an instrument developed for assessing the career decision self-efficacy construct. The original version of the scale was developed by Taylor and Betz (1983) and adapted into Turkish by Akin, Saricam and Kaya (2014). It was found that the Cronbach

Alpha internal consistency coefficient of the scale was .84. Akin et al. (2014) found the scale to have high validity and reliability. Thus, adequate psychometric properties were established in order to measure career decision-making self-efficacy expectations of individuals. The scale includes 18 statements, where each item is rated on a five-point scale ranging from “I don’t feel confident” (1), “I feel slightly confident” (2), “I feel moderately confident” (3), “I feel relatively confident” (4), “I feel extremely confident” (5). “Making career decision and not feeling anxious whether the decision is correct or incorrect”, “Determining the most appropriate career for myself” and “Identifying the important steps for achieving my career decision” are some examples of the statements in the scale.

The Vocational Outcome Expectation Scale was developed by McWhirter, Crothers and Rasheed (2000) and adapted into Turkish by Işık (2013). The scale measures vocational outcome expectations and includes 12 statements, where “my career plan will lead me to a satisfactory conclusion”, and “I will be successful in the career/profession that I choose”, serve as two sample statements from the scale. Each item is rated on a four-point scale ranging from “totally agree” (4), “agree” (3), “disagree” (2) to “totally

disagree” (1). “My future will be good”, “My family will approve my career decision” and “I will have a career that the society would respect” are some examples of the statements in the scale. Higher score means higher levels of expectation with regards to vocational outcome. McWhirter et al. (2000) showed that test-retest reliability of the scale was .59, and that the Cronbach’s Alpha internal consistency coefficient was .83. Işık (2013) determined that test-retest reliability of Turkish version was .79 and Cronbach’s Alpha internal consistency coefficient was .87 indicating high reliability and validity.

Procedure

After having approval from the ethical committee of Faculty of Education for scientific research, a consent form was prepared by the researchers. The consent form provided an overview of the research for the participants and indicated that participation in the research was voluntary. The survey was

administered to the students during the lecture hours. Students who were enrolled in Teaching Individuals with Mental Retardation Department and Teaching Individuals with Hearing Impairment Department from the Faculty of Education at a university in North Cyprus were eligible to participate in this study. Participants took approximately 15 minutes to complete the questionnaires.

Data Analysis

Data of the study were analysed using SPSS 20 programme. Significance level was considered as $p < .05$ in statistical analyses. Percentages, frequencies, t -tests, chi-squares, and Kruskal-Wallis tests, correlation and regression analyses were used in data analysis.

Results

Results obtained from the study were in line with the general aim and sub-aims and are provided in this section.

Descriptive Statistics on the Measures of Career Decision Making Self-Efficacy and Vocational Outcome Expectancy Levels of Preservice Special Education Teachers

Table 2 Mean and standard deviations of career decision-making self-efficacy and vocational outcome expectancy levels of preservice special education teachers

Variable	<i>N</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
Career decision-making self-efficacy	156	1	5	3.58	.69
Vocational outcome expectancy	156	1	4	3.38	.59

Results of descriptive statistics on total scores of career decision self-efficacy and vocational outcome expectancy levels are shown in Table 2. According to the table, mean and standard de-

viation results of career decision self-efficacy levels are ($\bar{X} = 3.58$, $SD = .69$) and mean and standard deviation results of vocational outcome expectancy levels are ($\bar{X} = 3.38$, $SD = .59$).

T-test Results of Career Decision Making Self-Efficacy Levels of Preservice Special Education Teachers Based on Age, Gender and Department Variables

Table 3 Career decision making self-efficacy levels of preservice special education teachers based on age, gender and department variables

Variable	<i>n</i>	<i>S</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Age	18–22	96	.70		
	23 and above	60	.61	154	-3.2 .002
Gender	Male	87	.67		
	Female	69	.71	154	1.03 .307
Department	Teaching individuals with mental retardation	100	.66		
	Teaching the hearing impaired	56	.74	154	-.545 .587

Note. $p < .05$.

Table 3 shows detailed information about t -test results of career decision making self-efficacy levels of pre-service special education teachers, based on age, gender and department variables. As can be seen from Table 3, career decision-making self-efficacy levels of preservice special education

teachers show significant difference based on age ($t(156) = -3.2$, $p < .05$). In other words, age of pre-service special education teachers significantly affects their career decision-making self-efficacy levels.

According to the results, career decision-making self-efficacy levels of pre-service special education teachers do not show significant differences based on their gender ($t(156) = 1.03, p < .05$). In addition, it was revealed that career

decision-making self-efficacy levels of preservice special education teachers do not show significant differences based on their Department ($t(156) = -.545, p < .05$).

Kruskal-Wallis Test Results of Career Decision Making Self-Efficacy Levels of Preservice Special Education Teachers Based on Class Level and Socioeconomic Level Variables

Table 4 Career decision self-efficacy levels of preservice special education teachers based on class level and socioeconomic status variables

Variable		<i>n</i>	Mean rank	Chi-square	<i>p</i>
Class level	1	6	76.50	5.282	.152
	2	67	72.84		
	3	59	77.47		
	4	24	97.35		
Socioeconomic level	Low	6	68.25	1.448	.485
	Middle	124	80.70		
	High	26	70.37		

Note. $p < .05$.

When there are categories in which adequate frequency cannot be obtained, the non-parametric Kruskal-Wallis test is used to show whether there are differences between categories. In the data analysis, it was revealed that both class level and socioeconomic level variables were not normally distributed, therefore, the Kruskal Wallis test was applied.

The Kruskal-Wallis test was applied to reveal whether there was a significant difference between

class levels and socioeconomic levels of preservice special education teachers and their career decision-making self-efficacy levels. Table 4 demonstrates the results of Kruskal-Wallis test. According to Table 4, it is seen that both class level and socioeconomic level variables show no significant difference based on career decision-making self-efficacy levels of preservice special education teachers.

T-Test Results of Vocational Outcome Expectancy Levels of Preservice Special Education Teachers Based on Age, Gender and Department Variables

Table 5 Vocational outcome expectancy levels of preservice special education teachers based on age, gender and department variables

Variable		<i>n</i>	<i>S</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Age	18–22	96	.64	154	-3.47	.716
	23 and above	60	.51			
Gender	Male	87	.62	154	1.02	.308
	Female	69	.57			
Department	Teaching individuals with mental retardation	100	.61	154	.08	.081
	Teaching the hearing impaired	56	.53			

Note. $p < .05$.

Table 5 provides detailed information about *t*-test results of vocational outcome expectancy levels of preservice special education teachers based on age, gender and department variables. As can be seen from Table 5, vocational outcome expectancy levels of preservice special education teachers do not show any significant difference based on age (t

(156) = -3.47, $p < .05$), gender ($t(156) = 1.02, p < .05$) and department ($t(156) = .08, p < .05$) variables. In other words, age, gender and department of preservice special education teachers do not significantly affect their vocational outcome expectancy levels.

Kruskal-Wallis Test Results of Vocational Outcome Expectancy Levels of Preservice Special Education Teachers Based on Class Level and Socioeconomic Level Variables

Table 6 Vocational outcome expectancy levels of preservice special education teachers based on class level and socioeconomic level variables

Variable		<i>n</i>	Mean rank	Chi-square	<i>p</i>
Class level	1	6	95.67	1.524	.677
	2	67	75.24		
	3	59	81.37		
	4	24	76.25		
Socioeconomic level	Low	6	86.08	.998	.607
	Middle	124	79.72		
	High	26	70.92		

Note. $p < .05$.

Both class level and socioeconomic level variables were not normally distributed. Therefore the Kruskal-Wallis test was applied to determine whether there are differences between class level and socioeconomic level categories of preservice special education teachers and their vocational outcome expectancy levels. In Table 6 above, the

results of Kruskal-Wallis test are provided. According to Table 6, it is evident that both class level and socioeconomic level variables do not show any significant differences in vocational outcome expectancy levels of preservice special education teachers.

Correlational Analysis Results of the Relationship Between Career Decision Self-Efficacy Levels and Vocational Outcome Expectancy Levels of Pre-service Special Education Teachers

Table 7 Relationship between career decision self-efficacy levels and vocational outcome expectancy levels of pre-service special education teachers

	Career decision-making self-efficacy	<i>N</i>
Vocational outcome expectancy	$r = .59$	156

Note. $p < .05$.

Pearson correlation analysis was applied in order to reveal whether there was a relationship between career decision self-efficacy and vocational outcome expectancy levels of preservice special education teachers as well as strength and direction of the relationship. Assumptions of the analysis were met because the effect size was calculated as .935. When Table 7 is examined, it is evident that there was a significant and positive

relationship between career decision self-efficacy and vocational outcome expectancy levels of preservice special education teachers at a moderate level ($r = .59$; $p < .05$). In other words, it can be said that when career decision self-efficacy increases, vocational outcome expectancy levels of preservice special education teachers also increase in a positive direction.

Regression Analysis Results of the Predictor Value of Career Decision Self-Efficacy for Vocational Outcome Expectancy Levels of Preservice Special Education Teachers

Table 8 Linear regression analysis of career decision self-efficacy for vocational outcome expectancy levels of pre-service special education teachers

Variables	B	SE	β	<i>t</i>	<i>p</i>	Pair	Partial
Constant	1.581	.205		7.715	.000		
Career decision self-efficacy	.503	.056	.585	8.948	.000	.585	.585
$R = .585$	$R^2 = .342$						

Note. $p < .05$.

Regression analysis is used for determining the relationship between two or more variables to make estimations and predictions using this relationship. In this study, linear regression analysis was applied to determine how career-decision self-efficacy levels of preservice special education teachers affect their vocational outcome expectancy levels. Table 8 shows the regression analysis results. As it can be seen from the table, career

decision-making self-efficacy can significantly explain vocational outcome expectancy levels of preservice special education teachers ($R = .585$, $R^2 = .342$, $p > .05$).

Discussion

The aim of this study was to examine the relationship between career decision-making self-efficacy and vocational outcome expectations of

preservice special education teachers and to determine whether these variables show difference based on demographic variables of the participants.

When the literature is examined, it is evident that there are various studies focusing on different aspects of career decision-making self-efficacy. Studies have focused on the relationship between career decision-making self-efficacy, career salience, locus of control and vocational indecision (Taylor & Popma, 1990); career-decision-making self-efficacy as a predictive factor for career decision-making attitudes and skills (Luzzo, 1993) and the relationship between career decision-making self-efficacy and career commitment among college students (Chung, 2002). In addition, research has also examined the relationship between perceived family interaction patterns, vocational identity, and career decision-making self-efficacy (Hargrove, Creagh & Burgess, 2002). Furthermore, studies have explored career choice and career decision-making self-efficacy (Gianakos, 1999) and the relationship between career decision-making self-efficacy, vocational identity and career exploration behaviour in African-American high school students (Gushue, Scanlan, Pantzer & Clarke, 2006). Moreover, the role of thinking styles in career decision-making self-efficacy among university students has also come under scrutiny (Fan, 2016).

According to the results obtained here, there is a significant relationship between age and career decision-making self-efficacy levels of teacher candidates. In other words, preservice teachers with higher ages had higher levels of career decision-making self-efficacy. However, the number of studies examining the relationship between age and career decision-making self-efficacy levels is limited. It is expected that this result will provide a new perspective for this field of study in terms of theory and practice. In parallel with the results of the present study, Guan, Capezio, Restubog, Read, Lajom and Li (2016) found that age as a demographic variable influences career aspirations of university students enrolled in a national university in South China. Similarly, Bacanli (2012) showed age to be an important factor, which affects career decision-making self-efficacies of university students in Turkey.

Gender was another demographic variable examined in this study. There are many studies with contradictory findings, which examine the role of gender on career decision-making self-efficacy. Gianakos (2001) has indicated that females reported higher scores than their male counterparts on career decision-making self-efficacy. Choi, Park, Yang, Lee, Lee and Lee (2012) revealed that gender roles are determinant factors for career decision-making self-efficacy. In contrast, Eaton, Watson, Foxcroft and Patton (2004) examined career decision-making self-efficacy among South

African high school students, and no gender differences were found. This result is reflected in the findings of the present study, indicating that career decision-making self-efficacy levels of preservice special education teachers does not show significant difference, based on their gender.

Furthermore, special education teaching departments of preservice teachers was another demographic variable examined, with no differences found between students from Teaching Individuals with Mental Retardation and Teaching Individuals with Hearing Impairment. According to the literature, it was seen that the number of studies examining the relationship between special education teaching departments, career-decision self-efficacy and vocational outcome expectancy are limited. It is worth noting that special education teaching departments are generally not handled as a demographic factor in other available studies.

Vocational outcome expectancy was the second main variable examined in the present study. Ferry, Fouad and Smith (2000) stated that age and gender are significant determinants of career-related choice behaviour. In the present study, all the demographic variables, namely age, gender, department, class level and socio-economic status were not found to be related with vocational outcome expectancy levels of preservice special education teachers. Similarly, Gushue (2006) found that outcome expectations do not show significant differences based on gender. In parallel with these results, Buldur and Bursal (2015) showed that gender and socio-economic status of preservice science teachers were not statistically significant in terms of predicting their future career expectations. Akman (1992) investigated the relationship between class levels of faculty of education students and their vocational outcome expectations. No significant differences between first and fourth year students in terms of their vocational outcome expectations were observed.

The primary objective of this study was to examine the relationship between career decision-making self-efficacy and vocational outcome expectancy, and whether self-efficacy has a predictive value on vocational outcome expectancy among preservice special education teachers from the Faculty of Education. Results showed a positive and moderate level of correlation between these two variables. Career decision-making self-efficacy has a predictive value on vocational outcome expectancies. Woo, Lu, Henfield and Bang (2017) found a similar result, showing that vocational self-efficacy beliefs significantly predict vocational outcome expectations.

The results of the current study showed that career decision-making self-efficacy is a significant predictor of vocational outcome expectancy levels of preservice special education teachers. When

preservice special education teachers feel that they are competent in making career decisions, they would expect that they will be successful in their professional life. Therefore, it can be inferred that career counselling interventions need to promote career decision-making self-efficacy to increase vocational outcome expectancy of high school students who are planning to study specialised education at university. Various studies discuss career development, career decision-making self-efficacy and outcome expectations carried out with university students. Yerin Güneri, Owen, Tanrikulu, Dolunay Cuğ and Büyükgöze Kavas (2016) examined career development needs among Faculty of Education students in Turkey. Gender and class levels of students did not reveal a difference when it came to their career development needs. Taylor and Popma (1990) investigated the relationship between career decision-making self-efficacy, career salience, locus of control, and vocational indecision among university students, determining that only career decision-making self-efficacy was significantly related to vocational indecision.

Faculty of Education students need support in obtaining information about the business world, transitioning from university life into the teaching profession, making career plans and coping with stress (Güneri, Aydın & Skovholt, 2003). Gizir (2005) carried out a study with final-year university students, revealing that they feel anxious about finding a job after graduation, not knowing what to do after graduation. For this reason, it is expected that this study might be a pioneering study to describe the career counselling needs of preservice special education teachers. If preservice special education teachers know what to do after graduation and how to pursue their careers, they will feel more commitment to their profession and students with special needs will see greater benefit. This might also increase job satisfaction and decrease job stress as well (Keles & Findikli, 2016; Mesarsova, 2016). Vertsberger and Gati (2016) found that young adults who have career decision difficulties and negative outcome expectations for their future career tend to seek help during this process. This is an important implication for career counselling intervention practices and this study has increased the awareness of the importance of providing help in the process of career decision-making. Determining which factors affect career-related thoughts and behaviours of university students can lead to these factors being controlled, and these students being supported. It is really crucial to provide career support and it can be said that this study will contribute to improve this situation. As mentioned before, there are many researchers focused on students' career decision-making processes from different regions in the world, and it is expected that this study will provide a different cultural perspective with findings from

North Cyprus. Researchers from other regions in the world, including Korea, France and South Africa, would thus benefit from the findings of the present study (Shumba & Naong, 2012; Sovet & Metz, 2014).

Conclusion and Recommendations

In conclusion, the present study aimed to determine the relationship between career decision-making self-efficacy and vocational outcome expectancy levels of preservice special education teachers. It is important to understand and reveal the perceptions of preservice special education teachers, as they determine the prospective attitude and behaviours of teacher candidates during their future professional lives. The results of the study provided sufficient information about teacher candidates' perceptions of these factors.

Overall, the study showed that teacher candidates have higher levels of career decision-making self-efficacy and vocational outcome expectancies. This study reveals the educational implications of career choice. Special education teachers need to be more aware about individual differences that follow new trends and practices in the area of special education, in order to meet the educational needs of their students. Preservice special education teachers would benefit their students with special needs far more when they have higher levels of career decision-making self-efficacy and vocational outcome expectancy, since they will be more willing to perform their profession.

In light of the results obtained from the study, the following recommendations for further research and practices are provided:

- educational policies and programmes ought to be improved in order to develop knowledge, understanding and awareness of preservice special education teachers;
- there ought to be more courses on special education in high schools for students to gain more knowledge about the field; and
- career counselling interventions ought to be increased during high school in order to increase career decision-making self-efficacy and vocational outcome expectations.

There are few limitations to the present study. This research was carried out at a private university in North Cyprus. Therefore, the results cannot be generalised to all universities in North Cyprus. Also, only special education teacher candidates participated in the study. Lastly, results of the study were obtained from individuals' self-assessments and responses to a survey. This might be regarded as another limitation to the study.

For further research, similar studies with qualitative or experimental research design might be carried out. In addition, this study might be carried out with university students from different departments or faculties and additional factors that

might predict career decision-making self-efficacy and vocational outcome expectancy ought to be examined.

Note

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