



Effects of Career Management Applications on Nursing Students' Career Decisions, Academic Motivation and Career Decision Regrets

Kariyer Yönetimi Uygulamalarının Hemşirelik Öğrencilerinin Kariyer Kararları, Akademik Motivasyon ve Kariyer Karar Pişmanlıkları Üzerine Etkileri

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Abstract

Aim: The aim of this study was to determine the effects of career management applications on career decisions, academic motivation, vocational outcome expectations and career decision regrets in nursing students.

Material and Method: This study is in an experimental research design with pre-application and post-application control groups. The study data was collected from the application and control group by face-to-face interview technique. Before and after the application, the scales and Personal Data Sheet were applied to both groups for the content of the research. The data was evaluated in the SPSS 21 package program.

Results: The data obtained before and after application were interpreted at the level of significance. There was a significant difference between career decision, career decision regret, career outcome expectation and academic motivation scores ($p<0.05$).

Conclusion: Career management applications are effective in increasing the career decisions, academic motivation, vocational outcome expectations and in decreasing the career decision regrets.

Keywords: Nursing, career, decision, motivation, expectation, regret

Öz

Amaç: Bu çalışmanın amacı, hemşirelik öğrencilerinde kariyer yönetimi uygulamalarının kariyer kararları, akademik motivasyon, mesleki sonuç beklentileri ve kariyer karar pişmanlıkları üzerine etkilerini belirlemek amacıyla gerçekleştirilmiştir.

Gereç ve Yöntem: Bu çalışma uygulama öncesi ve uygulama sonrası kontrol grupları ile deneysel bir araştırma tasarımıdır. Çalışma verileri uygulama ve kontrol grubundan yüz yüze görüşme tekniği ile toplanmıştır. Her iki gruba da başvuru öncesi ve sonrasında Kişisel Bilgi Formu ve araştırma içeriğine yönelik ölçekler uygulanmıştır. Veriler SPSS 21 paket programında değerlendirilmiştir.

Bulgular: Uygulama öncesi ve uygulama sonrası elde edilen veriler anlamlılık düzeyinde yorumlanmıştır. Kariyer yönetimi uygulama sonrası öğrencilerde kariyer kararı, kariyer karar pişmanlığı, mesleki sonuç beklentisi ve akademik motivasyon puanları arasında anlamlı bir fark olduğu belirlenmiştir ($p<0,05$).

Sonuç: Kariyer yönetimi uygulamaları, kariyer kararları, akademik motivasyon, mesleki sonuç beklentilerinin artırılmasında ve kariyer karar pişmanlıklarının azaltılmasında etkilidir.

Anahtar Kelimeler: Hemşirelik, kariyer, karar, motivasyon, beklenti, pişmanlık



INTRODUCTION

Career is an important auxiliary element in the formation of an individual's identity, individual and social status. The individual wants to meet students' needs from the first day in students' work life to satisfy expectations and desires, to make plans for the future, to rise in the hierarchical system at work and to be successful.^[1] Career is the means of finding answers to these desires of the individual and achieving a better standard of life both in psychological and social terms.^[2] It means proceeding on a chosen line of work and as a result of this, gaining status, having responsibility and achieving respectability.^[3] As a result, the fact emerges that the individual who has a successful career looks more positively into the future and is happier because students' achieve the designed targets.^[2]

A successful career is only possible through a career management. With the simplest sense, career management means planning made by people about their work lives.^[4] Career management applications are important for students in terms of many aspects. The activities carried out in this study help students move to healthy career development and help career planning, responsibility and knowledge about their profession, self-interest, talent, value and personality characteristics. It also develops the ability to recognize and solve any possible problems.

Career management is a process that is focused both on the organization and the individual.^[5] Individual career management is the individual efforts towards one's career targets. One's efforts are important in individual career management.^[6] Organizational career management, on the other hand, is planned and managed by the organization. In other words, plans and strategies are developed and applied by the organization in organizational career management and data are provided to provide continuous career management.^[7]

Career management consists of two components, which are "career planning" and "career development".^[8] Career planning is the process of defining the qualifications and objectives of an individual correctly, recognizing the working environment and the career opportunities outside it.^[9] Career development is the "lifelong process of managing learning, work, leisure and transitions in order to moved towards a personally determined and evolving future".^[10] An individual's self-recognition, harmony with career goals, and development of knowledge and skills through the process of vocational education and training occurs during one's career.^[11] Career planning and career development constitutes an uninterrupted process that must be considered together. Supporting the individual in terms of career planning and career development brings benefits both for the individual and the organization, which contributes to the high performance of individuals.^[12]

Career decision means that an individual chooses a career field, career program, or a career opportunity, which suits them among various options^[13] which have important long-term

contributions to the public life by individuals and a sense of personal productivity as well as way of life, emotional welfare, economic and social status.^[14] For this reason, it is natural for individuals to become engaged in career decisions at certain times in their lives. Career decisions are complicated behaviors. This complexity of career decisions is affected by the multitude of the factors that affect this process at a significant level.^[15] Previous studies showed that the career decision-making process affects many variables like socio-economic and cultural factors, academic achievement, value and positive opinions about the profession.^[16]

Psychological factors like the needs, values, interests, general and special abilities and personality traits of the individual, environmental factors like family, characteristics of the region, job opportunities, supply and demand status in the market affect career decision.^[15]

Academic motivation is the production of the necessary energy for academic works.^[17] Academic motivation expresses the desire, persistence, effort and excitement of the students to learn academic subjects.^[18] Academically motivated students become ready for lessons, they are interested in these lessons, they do not become tired of studying immediately and make more learning efforts. For this reason, academic motivation plays a key role throughout academic life.^[17]

Vocational outcome expectation means the expectation of individuals for the results of a profession.^[19] It is also defined as the decision-making behavior or the beliefs in long-term results acquired as a result of a particular education.^[20]

Career decision regret is the awareness that individuals would be better than the current career situation if they did things differently, or the cognitive-based negative emotion they face as a result of this thought.^[21] It is the result of a decision that does not give what is desirable and which is disappointing about their career.^[22] But career is the most important life role of every individual.^[23]

In the literature review, it was determined that there are no applicable studies targeting to determine the effect of career management applications in nursing students on career decisions, academic motivation, expectations of vocational outcome and career decision regrets. It is considered that the present study is the first and important in terms of discussing these topics together in the literature and it will contribute to future studies.

In this study, answers to the following questions were sought:

- "Do career management applications effect nursing students' career decisions?"
- "Do career management applications effect nursing students' academic motivations?"
- "Do career management applications effect nursing students' vocational outcome expectations?"
- "Do career management applications effect nursing students' career decision regrets?"

MATERIAL AND METHOD

Objective and Design

To determine the effect of career management applications in nursing students on career decisions, academic motivation, expectations of vocational outcome and career decision regrets with pre-test & post-test control group study design.

Participants

The universe of study consisted of the students of the Nursing Department of the Faculty of Health Sciences; and the sampling consisted of 40 students who studied at the 3rd grade in the Nursing Department with an average grade of 2.00 or higher who agreed to participate in the study. 20 of the students were included in the application group with simple randomization method and the remaining 20 were included in the control group. In order to calculate the sample size, the data obtained from the sample was used. During the research, power analysis was conducted in accordance with the data of the sample group, in the power analysis using the G Power program, the effect size was determined as 1.23 and the power of the research was 95%.²⁴ And the research was completed with a total of 40 students, 20 in the application group and 20 in the control group. On the basis of the difference between the groups before and after the implementation of the Career Decision Scale scores, the power analysis using the G Power program was found to have a confidence interval of 95%, an effect size of 0.88, and a power of research of 85%.

Instruments

The data of the study were collected with the forms given below:

Personal Information Form: It was prepared by the researchers in line with the literature. The departments, ages, genders, general average grades, classes, places of residence, sources of income and parental education status of the participants were questioned. The questions were prepared in open-ended and multiple-choice design.

Career Decision Scale: A 30-point "Career Decision Scale" that was developed by Yusupu²⁵ was used to measure the career decision levels of the university students. The scoring of the scale is based on 5-Point Likert style (1= This does not fit me, 5= This fits me completely). The lowest score is 30 and the highest score is 150 in the scale. High points mean indecision and low points mean determination. The Cronbach Alpha value of the original scale was 0.91. It was found 0.87 in this study.

Academic Motivation Scale (AMS): This scale was developed by Bozanoglu¹⁷ to determine the differences in the success and motivation levels of students at schools. The Cronbach Alpha was 0.87. It was 0.80 for this study. The scale consists of 20 items. It is scored in the 5-Point Likert style (1= This is absolutely not suitable, 5= This is absolutely suitable). The 19 items in the scale are positively scored except for one item, one item (Item 4) is reversed in scoring. The lowest

possible score is 20 and the highest score is 100 in the scale. High scores show that the academic motivation is high.

Vocational Outcome Expectation Scale (VOES): This is a 6-point scale that was developed to measure the beliefs of people in long-term consequences of success as a result of certain educational or career decision-making behaviors. It was developed by Fouad and Smith²⁶ and was adapted into Turkish by Isik.²⁷ Cronbach Alpha was 0.88. The scoring of the scale is made in the form of a 4-Point Likert style (1= I do not agree at all, 4= I totally agree). The lowest score is 12, the highest score is 48 in the scale. High scores show that the expectation of a vocational outcome is high. Cronbach Alpha was found 0.85 for this study.

Career Decision Regret Scale: The scale was created by Brehaut et al.²² and consists of 5 items and one dimension. The Turkish form of the scale was edited according to 5-Point Likert style (0= I do not agree at all, 4 = I totally agree). Items 1, 3 and 5 are reversely encoded. In the scoring, after the three item points are reversed, the points are added, the total points are obtained. The result is multiplied by 5, value between 0 and 100 is obtained. An increase between 0 and 100 in the score shows that decision regret is increased. If the score received from the scale is between 0 and 24, it is possible to argue that "there are no regrets about the decision"; if it is between 25 and 49, "there is a little regret about the decision"; if it is between 50 and 74, "regrets the decision", if it is between 75 and 100, "regretting the decision very much".²³ Cronbach Alpha was 0.91. In this study, it was 0.87

Data Collection

The study data were collected with face-to-face interview technique from the application and control group. The application was conducted by researchers in the form of training modules and 24/7 mobile consulting every week from 15.00 to 17.00 on Friday. In the first 4 modules, basic trainings were completed on nursing profession and values, training and development of nurses, career management and determination of nursing career paths²⁸ at the university classrooms. In the next 4 modules, personal SWOT analysis was carried out for each student in the classroom environment, student-specific career paths were determined after the analysis, the questions and answers were evaluated, interviews were made with 3 guests who were experts in the fields of Nursing of Surgery, Internal Medicine and Mental Health. The modules were completed in eight sessions. Mobile support was also provided to the students at the counseling step. For this purpose, the "Osmaniye Korkut Ata University Nursing Career Management" WhatsApp Group was created. The questions of the students were answered at any time. No interventions were made to the control group. The Personal Information Form, Career Decision Scale, Academic Motivation Scale, Vocational Outcome Expectation Scale and Career Decision Regret Scale were applied before and after the applications in the application and control group.

Statistical Analysis

The SPSS Statistics 21 program was used for statistical analyses. The Dependent Sample t-test, Independent Sample t-test, Mann Whitney U-test, Wilcoxon Signed Ranks test and Chi-Square Analysis Methods were used in the analyses of the data obtained in the study.

Ethical Consideration

In the progression of the study, scientific principles as well as the ethical principles of the Helsinki Declaration were held. In this context, the principles of informed consent, autonomy, secrecy and the protection of secrecy, fairness and no harm were taken into consideration. The study was conducted under the supervision and approval of Osmaniye Korkut Ata University Scientific Research and Publication Ethics Board of a public university (2019/4/6) and the Department of Nursing. The selection of the students in the study was based on being volunteers.

Limitations

The study is conducted with 3rd grade the sampling that consisted of the students whose marks were at and above 2.00 at the Nursing Department of a public university in Turkey. The findings of the study were limited with the items of the scales used.

RESULTS

The Socio-demographical characteristics of the application and control group students are given in **Table 1**. It was determined that 90% of the students in the application group were women, 45% stayed with their friends, 45% received scholarship, 40% of the mothers and 60% of the fathers were secondary school graduates. The mean age was 21.30 (SD=0.80), the academic average was 2.97(SD=0.35). It was also determined that 50% of the students in the control group were women, 65% stayed in dormitories, 40% received scholarship, 65% of the mothers and 75% of the fathers were secondary school graduates. The mean age was 21.65 (SD=1.38), the academic average was 2.82 (SD=0.62). It was determined that the students in the application and control group were similar in terms of demographical characteristics, that there were no statistically significant differences between the groups (p>0.05).

The scores before and after the application received by the application and control group were compared (**Table 2**). Before the career management applications, no significant differences were detected between the application and control group in career decision and career decision regret score averages (p>0.05). A significant difference was detected between academic motivation and vocational outcome expectation score averages (respectively p<0.001; p<0.05)

After the career management applications, a significant difference was detected between career decision, academic

motivation, vocational outcome expectation and career decision regret score averages in the application and control group (respectively p<0.05; p<0.001; p<0.05; p<0.05).

Table 1. Socio-demographical characteristics of the groups

	Application Group (n=20)		Control Group (n=20)		p
	n	%	n	%	
Gender					
Female	18	90	10	50	0.337*
Male	2	10	10	50	
Residence					
Dormitory	8	40	13	65	0.223*
Family	3	15	4	20	
Friends	9	45	3	15	
Source of Income					
Family	7	35	6	30	0.765*
Scholarship	9	45	8	40	
Credit	4	20	6	30	
Mother's Education					
Illiterate	5	25	5	25	0.070*
Secondary School	8	40	13	65	
High School	7	35	2	10	
Father's Education					
Illiterate	2	10	2	10	0.327*
Secondary School	12	60	15	75	
High School	6	30	3	15	
Mean Age (Mean±Sd)	21.30±0.80		21.65±1.38		0.335**
Academic Average (Mean±Sd)	2.97±0.35		2.82±0.62		0.369**

*x2 test was applied **The t-Test in Independent Samples was applied.

The average scores of the students at the application and control group are given in **Table 2**.

In the application group students, the score averages before and after the applications for career decision, academic motivation, vocational outcome expectation and career decision regret were compared (**Table 2**). There was a significant difference between the before-the-application and after-the-application score averages of career decision, vocational outcome expectation, academic motivation and career decision regret scores (respectively p<0.001; p<0.001; p<0.001; p<0.05).

In the control group, the scores of the career management applications of the students were compared as before and after the application score averages for career decision, academic motivation, vocational outcome expectation and career decision regret (**Table 2**). No significant differences were determined in terms of the score averages in career decision, academic motivation, vocational outcome expectation, career decision regret before the application and after the application (p>0.05).

Table 2. Average scores of the students at the groups (N=40)

Scales	Scale Averages				Application and Control Group	
	Application group		Control Group		Before the application	After the application
	Before the application Mean±Sd	After the application Mean±Sd	Before the application Mean±Sd	After the application Mean±Sd	p*	p*
Career Decision Scale p**	95.00±10.33	101.45±9.31	91.75±11.34	95.65±7.52	0.350	0.010
Academic Motivation Scale (AMS) p**	76.25±7.25	82.20±11.85	66.80±8.77	68.20±7.83	0.001	0.000
Vocational Outcome Expectation Scale (VOES) p**	16.70±1.97	21.65±6.00	14.95±2.28	15.65±2.32	0.013	0.000
Career Decision Regret Scale p**	14.75±2.04	19.90±5.24	15.00±2.63	14.75±2.65	0.740	0.000

p*: The difference between the application and control group (The t-test in Independent Samples and Mann Whitney U-test were applied)
p**: The difference between the scale average scores before the application and after the application (Dependent Paired Samples t-test and Wilcoxon Signed Ranks test were applied).

DISCUSSION

This study was conducted to determine the effect of career management applications, which were prepared in line with the literature, on the career decisions, academic motivation, vocational outcome expectations and career decision regrets of 40 third grade nursing students who studied at a public university with the pre-test & post-test control group research design.

As a result of the analyses of the pre-test & post-test difference scores, it was determined that the career decision, academic motivation, vocational outcome expectation scores of the application group increased, career decision regret scores decreased. These results show that career management applications have a positive effect on increasing the career decisions, academic motivation, vocational outcome expectations and on decreasing the career decision regrets of students. The results of this study were supported by experimental studies in the literature.^[29,30]

In the study conducted by McWhirter, Rasheed and Crothers^[19] they concluded that a 9-week career course was effective on social cognitive concepts like career decision-making and career skills competency expectations, perceived educational barriers, outcome expectations, career plans and career expectations. In the scope of career course, activities were applied about students' interests, values and skills, how to use career resources, how to collect information about different careers, how to prepare CVs and what training they can receive for potential career options. It was observed that the application had effects on career decisions and career skills competency expectations, outcome expectations and career plans of the students in the application group.

In their study on university students, Reese and Miller^[31] compared students who received career development courses and those who did not receive it. In this study, it was determined that the career decision levels of the students who

received the course increased at a significant level. Marko and Savickas^[32] conducted a study on 25 university students and used applications to increase the career planning and career development of individuals for the future and as a result of the measurements, they determined that there were statistically significant increases in students' future focus and career planning in their career lives between the application group and control group.

In the study conducted by Turner and Lapan^[33] it was determined that a computer-aided career intervention program was effective for both individual and group applications in secondary school students to increase their interest in non-traditional professions and their expectations of career competence. In the study of Koen et al.^[29] conducted on a group of post-graduate students, it was determined that there was a positive increase in career adjustment skills based on measurements conducted immediately after and six-month program. Foltz and Luzzo^[34] conducted a study on university students over the age of 25 and reported that there was significant increases in the career decision-making competencies after they compared the application and control groups.

In their studies, Diegelman and Subich^[35]; Fouad et al.^[36], McWhirter et al.^[19], reported that the career management applications increased the expectation of vocational outcome in students at a significant level, which is similar to the results of the present study. Guillen, on the other hand, concluded that a program that was developed to increase the outcome expectations had no significant effects on improving the expectations and vocational outcome of university students.^[37]

It was determined that career management applications increased academic motivation, there was a significant difference between the pre-test and post-test scores, the test scores of the students after career management applications were higher at a significant level. In the literature reviews, there were no studies conducted to determine the effect of career management applications on academic motivation.

The study that was conducted by Saracaloglu^[38] on post-graduate students determined that there was a positive and significant relation between research proficiency, attitude towards research and academic motivation and there was a significant and negative relation between research anxiety and academic motivation. Another important result of the study was that it was determined that academic motivation affected research competence. In addition, when the literature was examined, it was determined that the academic motivation concept is one of the factors that affect the success of students.^[39]

It was determined that career management applications have a negative effect on career decision regret scores. It is possible to argue that career management applications increase, the career decision regret scores decrease. No studies were detected in the literature conducted to determine the effect of career management applications on decision regret scores. It is possible to argue that only the average scores were compatible with the study.^[23]

In the control group, no significant differences were detected between all the scale scores in the time spent when the application was made in the application group.

When the application and control group were compared in terms of application times, it was determined that there was a significant difference between the two groups only in the academic motivation and vocational outcome expectations before the application. The average scores of the application group were high. After the application, significant differences were detected in career decision, academic motivation, vocational outcome expectation and career decision regret scores between the two groups. When the two groups were compared, it was determined that the career decision, academic motivation, vocational outcome expectation scores of the application group were high, career decision regret scores were low. When the after-the-application scores were evaluated, a significant difference was detected in career decision, academic motivation, vocational outcome expectation and career decision regret scores. The career decision, academic motivation, vocational outcome expectation scores of the application group increased and the career decision regret scores decreased.

CONCLUSION

The study findings showed that career management applications are effective in increasing career decision, academic motivation, vocational outcome expectation scores and in decreasing career decision regrets.

Similar studies can be conducted for career planning of students who study at different faculties. Career management applications can also be developed for individuals who work in different branches. It may be recommended that the scope of similar applications are expanded and implemented to different groups in different ages. It is considered that there are no experimental studies on this topic in nursing field in Turkey. It will contribute to the planning and implementation of similar studies.

ETHICAL DECLARATIONS

Ethics Committee Approval: The study was conducted under the supervision and approval of Osmaniye Korkut Ata University Scientific Research and Publication Ethics Board of a public university (2019/4/6) and the Department of Nursing.

Informed Consent: All patients signed the free and informed consent form.

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