**COGNITIVE FLEXIBILITY AS A PREDICTION OF CAREER COMPETENCY IN UNIVERSITY STUDENTS**

Prof. Dr. Hasan BOZGEYİKLİ

Selçuk University, Faculty of Education, Konya / Türkiye

[hbozgeyikli@selcuk.edu.tr](mailto:hbozgeyikli@selcuk.edu.tr) , ORCID: 0000-0002-6762-1990

İbrahim Halil CAN

Adana Kariyer Akademi, Adana/ Türkiye

[canibrahimhalil@gmail.com](mailto:canibrahimhalil@gmail.com) , ORCID: 0009-0003-8595-4945

**Abstract**

The aim of this study is to investigate the perceived level of career competency of university students in terms of perceived socio-economic disadvantage (SED), gender, and class level. In addition, this study aims to test whether cognitive flexibility level is a significant predictor of career competency using a relational scanning model based on the general scanning model. The study group of this research consists of 333 university students studying in various departments of universities in Turkey during the 2022-2023 academic year. Of the participating university students, 250 are male (45.8%) and 296 are female (54.2%). To collect research data, a personal information form containing closed-ended questions about the participants' demographic characteristics was used, which was developed by the researchers. In addition, the "Career Competencies Scale" was used to determine the students' level of career competency, and the "Cognitive Flexibility Scale" was used to determine their level of cognitive flexibility. In the analysis of the data, besides descriptive statistics, independent groups t-test was used to demonstrate differentiation according to gender variable, one-way analysis of variance (ANOVA) technique was used to demonstrate differentiation according to perceived SED and class level variables. Pearson correlation coefficient was calculated to reveal the relationship between students' career competencies and cognitive flexibility levels. Regression analysis technique was also used to determine the level of cognitive flexibility in predicting career competencies. The significance level was set at .05 in the study. According to the findings obtained through research, significant differences were found in the levels of cognitive flexibility and career competence among university students in terms of gender. Regarding the socio-economic level, it was observed that there was only a significant difference in the alternative sub-dimension of cognitive flexibility between groups, and the difference was in favor of students with a middle socio-economic status. It was also found that there was a significant relationship between the sub-dimensions of cognitive flexibility and career competence among students, and that cognitive flexibility was a significant predictor of career competence. Based on the findings, recommendations have been developed.

**Keywords:** Cognitive Flexibility, Career Competence, University Students.

**Introduction**

When the literature on career development is examined, it can be seen that in recent years, group work and curriculum discussions have been conducted to develop various career skills of individuals (e.g., Kuijpers & Meijers, 2012; Ondima et al., 2013; Stebleton et al., 2020). These studies not only aim to raise awareness about interests and values but also include competencies such as career exploration, job search methods, and building social networks, indicating the need for these competencies. These characteristics, simply defined as career competencies, describe the knowledge, skills, and abilities at the core of an individual's career development (Akkermans et al., 2013).

Career competencies have been examined in both employees (Ahmad & İmam, 2022; Akkermans & Tims, 2017; Zhang et al., 2022) and university students (Grosemans & Cuyper, 2021; Presti et al., 2022; Stremersch et al., 2021) in the literature. Research conducted with employees shows that career competencies can be an important factor associated with positive indicators of career development, such as career success (Talluri & Uppal, 2022), career satisfaction (Kong et al., 2012), career commitment (Ahmad & İmam, 2022), and career dedication (Saraswati et al., 2021).

Although career competencies emerged in the world of employees, they are also addressed, especially in the context of preparing for the workforce, among university students. Research conducted with university students has reported that career competencies are associated with their successful management of the transition from school to work (Grosemans & Cuyper, 2021; Presti et al., 2022; Stremersch et al., 2021). Therefore, it can be said that developing career competencies from the entrance to university can serve as a preventive and developmental intervention in preparing students for the workforce. In this case, it is important to investigate the relationship between students' levels of career competencies and other related characteristics. One of the characteristics believed to be associated with career competencies is cognitive flexibility.

Cognitive flexibility is defined by Martin and Anderson (1998) as a) being aware that there are suitable options and accessible alternatives in every situation, b) being flexible and willing to adapt to the situation, c) having the belief or self-perception that one can be flexible. Studies related to cognitive flexibility indicate that it is considered as an important aspect of interpersonal communication and the way individuals approach problem-solving and events. It has been found to be positively related to positive constructs and negatively related to negative constructs as a healthy personality trait (Asıcı & İkiz, 2015, Türe & Sarıçam, 2016). Individuals with high levels of cognitive flexibility are observed to be flexible in terms of communication, aware of their options in communication and problem situations, proactive, sensitive, confident in communication, and tolerant of disagreement and uncertainty (Martin & Rubin, 1995; Martin & Anderson, 2001).

University students face various problems, from adapting to a new environment and system to interpersonal relationships, and they try to solve them. In this context, it is thought that university students with high levels of cognitive flexibility will also have high levels of career competencies, which are important characteristics for transitioning from school to work. In this regard, the aim of the research is to examine the relationships between cognitive flexibility and career competencies and determine whether cognitive flexibility significantly predicts career competencies. To achieve this goal, the following questions have been addressed:

1. Do cognitive flexibility and career competency levels of university students significantly differ according to their genders?
2. Do cognitive flexibility and career competency levels of university students significantly differ according to their socio-economic backgrounds?
3. Is there a significant relationship between the levels of cognitive flexibility and career competency among university students?
4. Does the level of cognitive flexibility among university students significantly predict their level of career competency?

By investigating these questions, the research aims to contribute to the understanding of the role of cognitive flexibility in the development of career competencies among university students. The findings of this study can inform educational and career development programs to enhance students' cognitive flexibility and, consequently, their preparation for the workforce.

**Method**

**Participants and procedure**

The study group of the research consists of 546 university students studying in Turkey. Some characteristics of the study group of the research are shown in Table 1 and Table 2 below.

***Table 1. Distribution of the participants by gender***

|  |  |  |
| --- | --- | --- |
| Gender | Frequency | % |
| Female | 296 | 54.2 |
| Male | 250 | 45.8 |
| Total | 546 | 100.0 |

54.2% of the students participating in the research are female and 45.8% are male.

***Table 2. Distribution of the participants by SES***

|  |  |  |
| --- | --- | --- |
| SEL | Frequency | Percent |
| Low SEL | 115 | 21.1 |
| Medium SEL | 409 | 74.9 |
| High SEL | 22 | 4.0 |
| Total | 546 | 100.0 |

21.1% of the students are at low socioeconomic level, 74.9% at medium and 4% at high socio-economic level.

**Data collection tools**

***Personal Information Questionnaire:*** The questionnaire asked university students their gender, SES, and their degree.

***Cognitive Flexibility Inventory:*** Developed by Dennis and Vander Wal (2010), CFI was adapted into Turkish by Gülüm & Dağı (2012). It is prepared to measure the ability of individuals to produce alternative, harmonious, appropriate and balanced thoughts in difficult situations. It consists of twenty items and has two subscales. The Cronbach's alpha value in the first and last measurement of the alternatives subscale was 0.91. The Cronbach's alpha values of the control subscale were 0.86 in the first measurement and 0.84 in the last measurement. This scale was developed to clarify the concept of 'cognitive flexibility', which is not clearly defined in the literature, and to take measurements over the clarified concept. It is thought that as the score obtained from the scale increases, cognitive flexibility also increases (Dennis & Vander Wal, 2010).

***Career Competencies Questionnaire (CCQ):*** Career competencies were measured with the 21-item Career Competencies Questionnaire (CCQ; Akkermans et al., 2013). The items were measured on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). The CCQ items reflect six underlying career competencies: reflection on motivation was measured with 3 items (e.g., “I know what I like in my work”; α = .83), reflection on qualities was measured with 4 items (e.g., “I know my strengths in my work”; α = .92), networking was measured with 4 items (e.g., “I know how to ask for advice from members of my network”; α = .87), self-profiling was measured with 3 items (e.g., “I am able to show others what I want to achieve in my career”; α = .86), work exploration was measured with 3 items (e.g., “I can actively search for the developments in my area of work”; α = .86), and career control was measured with 4 items (e.g., “I can make clear career plans”; α = .88). The items of the CCQ have been shown to be positively related to related concepts such as general self-efficacy, task performance, and perceived employability (Akkermans et al., 2013).

**Process**

A questionnaire prepared by the researcher and administered to the students via Google Forms was used as a data collection tool for the research. t-test and analysis of variance techniques were used to determine the differentiation according to demographic variables. Pearson Product Moments Correlation coefficients were calculated to examine the potential relationships between cognitive flexibility and career competence, which are the variables of the study. Multiple Regression Analysis was used to determine the explanation ratios of the independent variables to the dependent variable.

**Findings**

The findings of the study are presented in this section. Firstly, an independent samples t-test analysis was conducted to examine the differentiation of cognitive flexibility and career competency levels among university students based on gender. The findings of this analysis are provided in Table 3.

When examining the findings in Table 3, it can be observed that in the cognitive flexibility control subscale, the mean score of males (=24.00) is higher than the mean score of females (=22,16) The calculated t-value (t=-3.769, p<.005) testing the significance of the difference between the mean scores of the groups indicates that the difference in the mean scores between the groups is significant at the .005 level. Therefore, male students have significantly higher levels of cognitive flexibility control compared to female students. In the cognitive flexibility alternatives subscale, it is observed that the mean score of females (=48.18) is higher than the mean score of males (=44.65). The calculated t-value (t=3.438, p<.005) testing the significance of the difference between the mean scores of the groups indicates that the difference in the mean scores between the groups is significant at the .005 level. Therefore, female students have a significantly higher level of cognitive flexibility in terms of alternatives compared to male students.

Regarding the Reflection on Motivation subscale of the Career Competency Scale, it is observed that the mean score of females (=11.37) is higher than the mean score of males (=10.73). The calculated t-value (t=-2.798, p<.005) testing the significance of the difference between the mean scores of the groups indicates that the difference in the mean scores between the groups is significant at the .005 level. Therefore, female students have a significantly higher level of reflection on motivation compared to male students.

**Table 3. t-test results regarding the differentiation of students' cognitive flexibility and career competencies by gender**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Variables | Gender | N | Mean | Std. Dev. | t | p |
| Control | Female | 296 | 22.16 | 5.692 | **-3.769\*** | ,001 |
| Male | 250 | 24.00 | 5.686 |
| Alternatives | Female | 296 | 48.18 | 11.100 | **3.438\*** | ,001 |
| Male | 250 | 44.65 | 12.895 |
| Reflection on motivation | Female | 296 | 11.37 | 2.468 | **2,798\*** | ,005 |
| Male | 250 | 10.73 | 2.879 |
| Reflection on qualities | Female | 296 | 14.83 | 3.293 | **3,659\*** | ,001 |
| Male | 250 | 13.70 | 3.977 |
| Networking | Female | 296 | 12.32 | 3.971 | -.802 | .423 |
| Male | 250 | 12.58 | 3.605 |
| Self-profiling | Female | 296 | 10.85 | 2.652 | 1,692 | ,091 |
| Male | 250 | 10.45 | 2.914 |
| Work exploration | Female | 296 | 10.27 | 2.839 | .356 | .722 |
| Male | 250 | 10.18 | 2.849 |
| Career Control | Female | 296 | 14.25 | 3.671 | **2.995\*** | .003 |
| Male | 250 | 13.24 | 4.180 |

\*. p< 0.05

According to the findings in Table 3, in the Reflection on Qualities subscale of the Career Competency Scale, it is observed that the mean score of females (=14.83) is higher than the mean score of males (=13.70). The calculated t-value (t=-2.798, p<.005) testing the significance of the difference between the mean scores of the groups indicates that the difference in the mean scores between the groups is significant at the .005 level. Therefore, female students have a significantly higher level of reflection on qualities compared to male students. In the Career Control subscale of the Career Competency Scale, it is observed that the mean score of females (=14.25) is higher than the mean score of males (=13.24). The calculated t-value (t=-2.995, p<.005) testing the significance of the difference between the mean scores of the groups indicates that the difference in the mean scores between the groups is significant at the .005 level. Therefore, female students have a significantly higher level of career control compared to male students. However, in the networking, self-profiling, and work exploration subscales of the Career Competency Scale, the difference in mean scores between the groups is not significant at the .005 level, as seen in Table 3.

One-way analysis of variance (ANOVA) was conducted to test the differentiation of cognitive flexibility and career competency levels of university students based on their socio-economic levels. The findings of this analysis are provided in Table 4.

When examining the findings in Table 4, it can be observed that there is no significant difference in the mean scores between groups in the reflection on motivation, reflection on qualities, networking, self-profiling, work exploration, and career control subscales of the career competency scale at the .005 level. Therefore, it can be concluded that there is no significant differentiation in the levels of career competency among university students based on their socio-economic levels.

In the cognitive flexibility scale, the difference in mean scores between groups is also not significant at the .005 level, as seen in Table 4. However, in the cognitive flexibility alternatives subscale, the calculated F-value (F=6.423, p<.005), testing the significance of the difference in mean scores between groups, indicates that the difference in mean scores between groups is significant at the .005 level.

**Table 4. F-test (ANOVA) results regarding the differentiation of students' cognitive flexibility and career competencies according to SEL**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | N | Mean | Std. Deviation | F | p | Scheffe |
|
| Control | Lower SEL | 115 | 23.71 | 5.714 | 1,118 | ,328 |  |
| Medium SEL | 409 | 22.83 | 5.760 |
| Upper SEL | 22 | 22.59 | 5.917 |
| Alternatives | Lower SEL | 115 | 43.72 | 12.952 | **6,423** | **,002\*** | **2>1** |
| Medium SEL | 409 | 47.61 | 11.619 |
| Upper SEL | 22 | 42.00 | 12.720 |
| Reflection on motivation | Lower SEL | 115 | 11.10 | 2.785 | .306 | .736 |  |
| Medium SEL | 409 | 11.09 | 2.630 |
| Upper SEL | 22 | 10.64 | 3.125 |
| Reflection on qualities | Lower SEL | 115 | 14.58 | 3.765 | .443 | .642 |  |
| Medium SEL | 409 | 14.25 | 3.609 |
| Upper SEL | 22 | 14.00 | 4.209 |
| Networking | Lower SEL | 115 | 12.25 | 3.722 | .173 | ,841 |  |
| Medium SEL | 409 | 12.49 | 3.776 |
| Upper SEL | 22 | 12.50 | 4.857 |
| Self-profiling | Lower SEL | 115 | 10.58 | 2.844 | .366 | .694 |  |
| Medium SEL | 409 | 10.67 | 2.747 |
| Upper SEL | 22 | 11.14 | 3.121 |
| Work exploration | Lower SEL | 115 | 10.22 | 2.711 | .047 | .954 |  |
| Medium SEL | 409 | 10.22 | 2.890 |
| Upper SEL | 22 | 10.41 | 2.702 |
| Career Control | Lower SEL | 115 | 13.74 | 3.869 | .56 | .946 |  |
| Medium SEL | 409 | 13.78 | 3.945 |
| Upper SEL | 22 | 14.05 | 4.391 |

\*. p< 0.05

When examining the results of the Scheffe analysis conducted to determine the source of the difference in mean scores, it is observed that the level of cognitive flexibility alternatives among students with a moderate socio-economic level is higher than that of students with a lower socio-economic level.

To determine the level of relationship between cognitive flexibility and career competencies among university students, a Pearson correlation analysis was conducted. The findings of the analysis are presented in Table 5. When examining the findings in Table 5, it can be observed that there is a positive and significant relationship between the cognitive flexibility scale's alternatives subscale and the reflection on motivation (r=0.462, p<0.001), reflection on qualities (r=0.525, p<0.001), networking (r=0.383, p<0.001), self-profiling (r=0.546, p<0.001), work exploration (r=0.436, p<0.001), and career control (r=0.398, p<0.001) subscales of the career competency scale. Therefore, it can be said that as the level of cognitive flexibility alternatives increases, the level of career competencies also increases.

On the other hand, a negative and weak relationship is observed only between the control subscale of the cognitive flexibility scale and the reflection on qualities subscale in Table 5. No significant relationship was found between the control subscale and the other subscales of the career competency scale.

**Table 5. The relationship between students' cognitive flexibility and career competencies**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1. Control | r | 1 |  |  |  |  |  |  |  |
| p |  |  |  |  |  |  |  |  |
| 1. Alternatives | r | -.224\*\* | 1 |  |  |  |  |  |  |
| p | .000 |  |  |  |  |  |  |  |
| 1. reflection on motivation | r | -.027 | .462\*\* | 1 |  |  |  |  |  |
| p | .532 | .000 |  |  |  |  |  |  |
| 1. reflection on qualities | r | -.092\* | .525\*\* | .757\*\* | 1 |  |  |  |  |
| p | .031 | .000 | .000 |  |  |  |  |  |
| 1. Networking | r | .030 | .383\*\* | .486\*\* | .562\*\* | 1 |  |  |  |
| p | .486 | .000 | .000 | .000 |  |  |  |  |
| 1. Self-profiling | r | .002 | .546\*\* | .685\*\* | .744\*\* | .633\*\* | 1 |  |  |
| p | .960 | .000 | .000 | .000 | .000 |  |  |  |
| 1. Work exploration | r | .004 | .436\*\* | .568\*\* | .646\*\* | .622\*\* | .732\*\* | 1 |  |
| p | .920 | .000 | .000 | .000 | .000 | .000 |  |  |
| 1. Career Control | r | -.008 | .398\*\* | .580\*\* | .610\*\* | .512\*\* | .677\*\* | .673\*\* | 1 |
| p | .851 | .000 | .000 | .000 | .000 | .000 | .000 |  |
| \*\*. Correlation is significant at the 0.01 level (2-tailed). | | | | | | | | | |
| \*. Correlation is significant at the 0.05 level (2-tailed). | | | | | | | | | |

The results of multiple linear regression analysis, conducted to determine the predictive power of the cognitive flexibility dimensions (control and alternatives) on the scores obtained from the career competency subscales (reflection on motivation, reflection on qualities, networking, self-profiling, work exploration, and career control), are presented in Table 6, Table 7, Table 8, Table 9, Table 10, and Table 11.

**Table 6. Regression Analysis Results for the Prediction of reflection on motivation Competencies**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| (Constant) | 5.245 | .648 |  | 8.091 | .000 |
| Control | .038 | .018 | .081 | 2.073 | .039 |
| Alternatives | .107 | .009 | .480 | 12.353 | .000 |
| R=,469 | R2=.222 | | F=76,553 | P<,001 |  |

a. Dependent Variable: Reflection on motivation

According to the findings in Table 6, the cognitive flexibility scale, including the control and alternatives dimensions as predictor variables, significantly predicts the reflection on motivation subscale of career competencies (R2=0.222, F=76.553, p<0.001). This finding indicates that the combined effect of cognitive flexibility's control and alternatives dimensions explains 22.2% of the variance in scores related to reflection on motivation. Among the independent variables, alternatives (β=0.480) is the strongest predictor, followed by control (β=0.22).

In Table 7, the findings indicate that the cognitive flexibility scale, including the control and alternatives dimensions as predictor variables, significantly predicts the reflection on qualities subscale of career competencies (R2=0.276, F=103.390, p<0.001).

**Table 7. Regression Analysis Results for the Prediction of reflection on qualities Competencies**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| (Constant) | 6.438 | .854 |  | 7.542 | .000 |
| Control | .017 | .024 | .026 | .696 | .487 |
| Alternatives | .161 | .011 | .530 | 14.155 | .000 |
| R=,525 | R2=.276 | | F=103,390 | P<,001 |  |

a. Dependent Variable: reflection on qualities

This finding suggests that the combined effect of cognitive flexibility's control and alternatives dimensions explains 27.6% of the variance in scores related to reflection on qualities. Among the independent variables, alternatives (β=0.530) is the strongest predictor, while control (β=0.026) alone does not reach significance (p>0.005) in predicting reflection on qualities.

**Table 8. Regression Analysis Results for the Prediction of networking Competencies**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| (Constant) | 4.569 | .955 |  | 4.784 | .000 |
| Control | .080 | .027 | .122 | 3.013 | .003 |
| Alternatives | .129 | .013 | .410 | 10.165 | .000 |
| R=,401 | R2=.161 | | F=51.956 | P<,001 |  |

a. Dependent Variable: Networking

Based on the findings in Table 8, the cognitive flexibility scale, including the control and alternatives dimensions as predictor variables, significantly predicts the networking subscale of career competencies (R2=0.161, F=51.956, p<0.001). This finding indicates that the combined effect of cognitive flexibility's control and alternatives dimensions explains 16.1% of the variance in scores related to networking. Among the independent variables, alternatives (β=0.410) is the strongest predictor, followed by control (β=0.122).

**Table 9. Regression Analysis Results for the Prediction of self-profiling Competencies**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| (Constant) | 3.053 | .631 |  | 4.842 | .000 |
| Control | .063 | .018 | .131 | 3.583 | .000 |
| Alternatives | .132 | .008 | .575 | 15.761 | .000 |
| R=,560 | R2=.314 | | F=124.201 | P<,001 |  |

a. Dependent Variable: Self profiling

According to the findings in Table 9, the cognitive flexibility scale, including the control and alternatives dimensions as predictor variables, significantly predicts the self-profiling subscale of career competencies (R2=0.314, F=124.201, p<0.001). This finding suggests that the combined effect of cognitive flexibility's control and alternatives dimensions explains 31.4% of the variance in scores related to self-profiling. Among the independent variables, alternatives (β=0.575) is the strongest predictor, followed by control (β=0.131).

**Table 10. Regression Analysis Results for the Prediction of work exploration Competencies**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| (Constant) | 3.975 | .696 |  | 5.714 | .000 |
| Control | .053 | .019 | .107 | 2.719 | .007 |
| Alternatives | .108 | .009 | .460 | 11.677 | .000 |
| R=,448 | R2=.201 | | F=68.184 | P<,001 |  |

a. Dependent Variable: work exploration

The findings in Table 10 indicate that the cognitive flexibility scale, including the control and alternatives dimensions as predictor variables, significantly predicts the work exploration subscale of career competencies (R2=0.201, F=68.184, p<0.001). This finding suggests that the combined effect of cognitive flexibility's control and alternatives dimensions explains 20.1% of the variance in scores related to work exploration. Among the independent variables, alternatives (β=0.460) is the strongest predictor, followed by control (β=0.107).

**Table 11. Regression Analysis Results for the Prediction of Career Control Competencies**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| B | Std. Error | Beta |
| (Constant) | 6.114 | .986 |  | 6.201 | .000 |
| Control | .058 | .028 | .085 | 2.115 | .035 |
| Alternatives | .136 | .013 | .417 | 10.353 | .000 |
| R=,406 | R2=.165 | | F=53.616 | P<,001 |  |

a. Dependent Variable: Career Control

According to the findings in Table 11, the cognitive flexibility scale, including the control and alternatives dimensions as predictor variables, significantly predicts the career control subscale of career competencies (R2=0.165, F=53.616, p<0.001). This finding indicates that the combined effect of cognitive flexibility's control and alternatives dimensions explains 16.5% of the variance in scores related to career control. Among the independent variables, alternatives (β=0.417) is the strongest predictor, followed by control (β=0.085).

**Conclusion**

In the research, it was found that the cognitive flexibility levels of university students significantly differ based on gender. Female students demonstrated significantly higher levels of alternative thinking compared to male students, while male students exhibited significantly higher levels of control. Additionally, female students showed significantly higher levels of reflection on motivation, reflection on qualities, and career control competencies compared to male students. Regarding the differentiation of cognitive flexibility and career competency levels based on socioeconomic status, the results indicated a significant difference only in the alternative thinking dimension of cognitive flexibility. It was found that students with a middle socioeconomic status had higher levels of alternative thinking compared to those with a lower socioeconomic status.

Another result obtained in the research pertains to the relationship between cognitive flexibility and career competencies. Accordingly, a positive significant relationship was found between the alternative thinking dimension of cognitive flexibility and all dimensions of career competencies. However, a negative low relationship was identified only between the control dimension of cognitive flexibility and the reflection on qualities dimension. Hence, it can be stated that students with higher levels of alternative thinking in cognitive flexibility also exhibit higher levels of career competencies.

The findings regarding the predictive role of cognitive flexibility on career competencies support this view. The results indicate that the level of cognitive flexibility is an important predictor of career competencies. This finding suggests that enhancing cognitive flexibility is crucial in increasing career competencies, which are essential for university students' transition from school to work. Therefore, it is recommended to implement psycho-educational programs in career counseling services for university students that aim to improve their cognitive flexibility and assist them in developing career competencies. Additionally, it is necessary to support these findings with experimental studies.

**References**

Ahmad, R., & Imam, H. (2022). Roles of competencies, career shock, and satisfaction in career commitment: Evidence from project-based organizations. *Project Leadership and Society*, *3*, 100052. <https://doi.org/10.1016/j.plas.2022.100052>

Akkermans, J., & Tims, M. (2017). Crafting your career: How do career competencies relate to career success through Job Crafting? *Applied Psychology*, *66*(1), 168–195. <https://doi.org/10.1111/apps.12082>

Akkermans, J., Brenninkmeijer, V., Huibers, M., & Blonk, R. W. B. (2013). Competencies for the contemporary career: Development and preliminary validation of the Career Competencies Questionnaire. *Journal of Career Development*, 40, 245–267.

Asıcı, E.& İkiz, F. E. (2015), Mutluluğa giden bir yol: bilişsel esneklik. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi,* 35, 191 -211.

Dennis J.P. & Vander Wal J.S. (2010). The cognitive flexibility inventory: Instrument development and estimates of reliability and validity. *Cognitive Therapy and Research*, 34, 241-253.

Grosemans, I., & Cuyper, N. D. (2021). Career competencies in the transition from higher education to the labor market: Examining developmental trajectories. *Journal of Vocational Behavior*, *128*, 103602. <https://doi.org/10.1016/j.jvb.2021.103602>

Gülüm, İ. V. & Dağ, İ. (2012). The Turkish adaptation, validity and reliability study of The Repetitive Thinking Questionnaire and The Cognitive Flexibility Inventory. *Anatolian Journal of Psychiatry, 13*(3), 216-223.

Kong, H., Cheung, C., & Song, H. (2012). Determinants and outcome of career competencies: Perspectives of hotel managers in China. *International Journal of Hospitality Management*, *31*(3), 712–719. <https://doi.org/10.1016/j.ijhm.2011.09.007>

Kuijpers, M., & Meijers, F. (2012). Learning for now or later? Career competencies among students in higher vocational education in the Netherlands. *Studies in Higher Education*, *37*(4), 449–467. <https://doi.org/10.1080/03075079.2010.523144>

Martin, M. M.& Anderson, C. M. (2001). The relationship between cognitive flexibility and affinity-seeking strategies. Advances in Psychological Research, 4, 69-76.

Martin, M. M.&Anderson, C. M. (1998). The cognitive flexibility scale: Three validity studies, Communication Reports, 11:1, 1-9, DOI: [10.1080/08934219809367680](https://doi.org/10.1080/08934219809367680)

Martin, M. M.&Rubin, R. B. (1995). A newmeasure of cognitiveflexibility. PsychologicalReports, 76, 623-626.

Ondima, P. C., Mokogi H., Ombaba S., Osoro G.N. (2013). Effectiveness of guidance and counselling programme in enhancing students academic, career and personal competencies. A Case of secondary schools in Nyamira District, Kenya. *Journal of Education and Practice*, *4*(24), 50-57.

Presti, A. L., Capone, V., Aversano, A., & Akkermans, J. (2022). Career Competencies and Career Success: On the Roles of Employability Activities and Academic Satisfaction During the School-to-Work Transition. *Journal of Career Development*, *49*(1), 107–125. <https://doi.org/10.1177/0894845321992536>

Saraswati, S., Nugraheni, E. P., Putra, E. M., & Wiratomo, G. H. (2021) *Career Competence and Career Engagement: The Mediating Roles of Career Adaptability.* Proceedings of the 11th Annual International Conference on Industrial Engineering and Operations Management Singapore. pp. 3562-3568. ISSN 978-1-7923-6124-1

Stebleton, M. J., Kaler, L. S., Diamond, K. K., & Lee, C. (2020). Examining Career Readiness in a Liberal Arts Undergraduate Career Planning Course. *Journal of Employment Counseling*, *57*(1), 14–26. <https://doi.org/10.1002/joec.12135>

Stremersch, J., Hoye, G. V., & Hooft, E. van. (2021). How to successfully manage the school-to-work transition: Integrating job search quality in the social cognitive model of career self-management. *Journal of Vocational Behavior*, *131*, 103643. <https://doi.org/10.1016/j.jvb.2021.103643>

Talluri, S. B., & Uppal, N. (2022). Subjective Career Success, Career Competencies, and Perceived Employability: Three-way Interaction Effects on Organizational and Occupational Turnover Intentions. *Journal of Career Assessment*, 106907272211194. <https://doi.org/10.1177/10690727221119452>

Türe, H. B. ve Sarıçam, H. (2016),Öğretmen Adaylarının Bilişsel Esneklik Düzeyleri ile Problem Çözme Becerileri Arasındaki İlişkinin İncelenmesi.

Zhang, W., Chin, T., Peng, J.-B., Shan, Y.-N., & Agbanyo, G. K. (2022). The Moderating Effect of Occupational Burn-Out on the Link of Career Competencies to Career Sustainability Amid the COVID-19 Pandemic: A Mixed-Method Study. *Frontiers in Psychology*, *13*, 916669. <https://doi.org/10.3389/fpsyg.2022.916669>