

## THE PREDICTION OF THE FIVE FACTOR PERSONALITY DIMENSIONS OF TURKISH LATE ADOLESCENTS THROUGH THE FAMILY'S INFLUENCE ON CAREER DEVELOPMENT

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### Abstract

*The aim of this study was to evaluate the predictive effect of the five factor personality traits of Turkish late adolescents on the family's influence on career development, and to thereby investigate the relationship between the five factor personality traits and the family's influence on career development. The study group consisted of students studying 1st -4th years in Erciyes University Faculty of Education and Kırıkkale University Faculty of Education. The Family Influence on Career Development Scale and the Adjective-Based Personality Test were used as research instruments. The data gathered were analyzed with a hierarchical regression analysis method. The findings revealed that family influence on the career development of late adolescents has significant relationships with personality traits and individual variables. These findings suggest that psycho-educational studies improving increase family support can be carried out for late adolescents who experience problems in career development.*

Keywords: five factor; personality traits; family career support; late adolescent

### Introduction

The career development of adolescents is a very important process, which determines how they will spend their lives, and shapes most other aspects of their futures. An evaluation of career development theories reveals

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that the processes leading to career choices are mainly based on skill, interest and personal values (Paloş & Drobot, 2010). For individuals, ideal career choices rest on a realistic personality and perception, as well as a supportive and constructive social environment. In career development processes individual-centered approaches generally tend to base their interpretation on personality, interest, abilities and values, while social environment-based approaches tend to base their interpretation on family, school, society and economic conditions (Brown, 2002).

Kuzgun (2000) evaluated the family influence on career development with four basic dimensions: (1) The family's role in developing skills; (2) The family's attitude towards different occupations; (3) The family's influence on the child's self-comprehension; and (4) The family's ability to satisfy the child's basic psychosocial needs. It generally considered that families have a greater influence on children's career plans than teachers and counselors (Kasimati, 1991; Orenuga & Da Costa, 2006; Otto, 1989). Similarly, families have a more pronounced effect on their children's career development than school (Falaye & Adams, 2008; Osoro, Amundson, & Borgen, 2000). Moreover, studies suggest that, within the family, mothers in particular have a greater influence on career development (Hairston, 2000; Brown, 2004).

By providing social support (in the form of information, opportunities to perform research, financial support, social environment, social capital, etc.), as well as a confident environment, families allow their children to shape their career processes in a healthier and more constructive environment (Chen, Fu, Li, Lou, & Yu, 2012; Paloş & Drobot, 2010). Failure to provide all-round familial support to the career development of adolescents causes them to eventually take career decisions based not on their dominant abilities and values, but on financial considerations (Paloş & Drobot, 2010). Individuals are able to find the most suitable career for themselves by evaluating and eliminating other career alternatives based on personality and social environment (the two most important aspects that affect the career process) (Paloş & Drobot, 2010).

From the standpoint of personality, which plays an important role in career development One of the Big Five personality dimensions, openness to experience is known as both intellect and culture and its facets are related to

imagination, curiosity, broad-mindedness and artistic sensitivity. Agreeableness dimension is known as pleasantness and its facets are related to kindness, flexibility, trust, good nature, cooperation, forgiveness and empathy. Conscientiousness dimension is known as trustworthiness, prudence and compliance, its facets reflect both trustworthiness (for example; attention, consideration, dutifulness, orderliness, competence, being planned) and willpower (for example; industriousness, achievement, centralism and determination). At the same time emotional instability/neuroticism being emotionally unstable and extroversion regarding temperament of an individual. Each dimension is considered as a continuity (Viswesvaran & Ones, 2003).

Five Factor Model is a hierarchical model covering abovementioned personality dimensions. Personality traits are defined as the continuous dimensions of individual differences in order to show the consistent patterns of thoughts, feelings and actions (McCrae & Costa, 1990). Traits reflect permanent situations. Five Factor Model is based on the studies which define natural language aptitude (*cited in* Costa & Widiger, 2002). Five Factor is based on endogenous basic tendencies, biological and hereditary foundations. These basic tendencies cover characteristic adaptations, attitudes, habits, personal endeavours as well as an individual's own identity. Characteristic adaptations occur as a result of the interaction between external influences and basic tendencies; thus, characteristic adaptations affect an overt attitude of an individual and an individual's biography composed of tested accumulation of feelings. According to this theory, the five factors mature during early adulthood and adolescence and after this period, although small changes are observed in middle and late adulthood they remain relatively constant and stable (Roterts, Walton, & Viechtbauer, 2006, *cited in* McCrae & Löckenhoff, 2010). Many studies had been conducted until Cattell and Norman put forward Five Factor Personality Dimensions based on personality traits; namely, emotional instability/neuroticism, extroversion, openness to experience, agreeableness and conscientiousness (Norman, 1963, *cited in* De Raad, 2000; Howard & Howard, 1995).

When five factor personality dimensions literature is reviewed, Raynor and Levine (2009) determined that conscientiousness and extroversion in college students accompany healthy behaviours. In their study, Schmitt, Allik, McCrae, Benet-Martinez, Alcalay, Ault, et al. (2007) found that the level of

conscientiousness dimension in the people living in Africa and East Asia it was found that it is significantly different from those living in the other regions of the world. Krüger (2009) indicated that the ability of school leaders change from school to school according to five factor personality dimensions of conscientiousness, emotional instability, extroversion, agreeableness and openness to experience. Robinson, Wright, and Kendall (2011) determined that there is a high correlation between being less attached to parents and agreeableness, openness to experience and emotional instability. In their study on post-graduate students studying psychology, Flanagan and Malgady (2011) found that there is a meaningful correlation between conscientiousness dimension and internship evaluation.

Meanwhile, some other studies can be found in the literature, for example; contentual and task based performance (Rose, Ramalu, Uli, & Kumar, 2010), the value of being successful (Veage, Ciarrochi, & Heaven, 2011), and occupation (Lounsbury, Smith, Levy, Leong, & Gibson, 2009; Johnson, Rowatt, & Petrini, 2011). Similarly there are other studies into the cooperation (Volk, Thöni, & Ruigrok, 2011), and educational gains, returns and conscientiousness (O'Connell & Sheikh, 2011).

In Turkey, on the other hand, in his study on female and male sportspersons, Tatar (2009) found that the liveliness, assertiveness, emotional lability, predisposition to anxiety, analytical thinking, sensitivity and openness to innovation subdimension total scores of females are high; on the other hand, the tranquillity and reconciliation sub dimension scores of males are high. In their study on university students aged 18-26, Basım, Cetin, and Tabak (2009) found that openness to development and compatibility personality traits predict all approaches of resolving conflicts. In their study on individuals working in defence industry businesses, Erkus and Tabak (2009) found that there are meaningful and positive correlations between adaptability personality trait and cooperative, conciliatory, helpful, and withdrawing conflict management styles.

## **Objectives**

While the personality traits of adolescents have a determining influence on their career development, their families have an effect more significant than that of teachers, school and social environment. In addition, while working on their career development, adolescents must concurrently work on ensuring

consistency in their thoughts, emotions and actions. The family has an important role in the career development of individuals. During this process, their basic personality traits, which are the constant element of their individual differences, will also have an effect on their career development. Therefore, in this study, our aim was to evaluate the predictive effect of the five factor personality traits of Turkish late adolescents on the family's influence on career development, and to thereby investigate the relationship between the five factor personality traits and the family's influence on career development.

### **Method**

In this study, Convenience Sampling Method (Wallen & Fraenkel, 2001; Cohen, Manion, & Morrison, 2007) was used by the researcher who involved the participants who could be reached during the course of the study. This was designed as a cross-sectional study.

#### *Participants*

The sampling group consisted of 336 1st - 4th year students studying at Erciyes University Faculty of Education and Kırıkkale University Faculty of Education during the fall 2013-2014 academic year. The number of female students participating in the study was 242 (72%,  $M_{age}=19.57$ ) and the number of male students participating in the study was 94 (28%,  $M_{age}=19.46$ ).

#### *Instruments*

*Personality Test Based on Adjectives (ABPT)*. Developed by Bacanlı, İlhan, and Aslan (2009) Personality Test based on Adjectives (ABPT) is a Likert type scale consisting of 40 pairs of adjectives which can be graded between 1-7. *ABPT* is composed of five dimensions; extroversion, agreeableness, conscientiousness, emotional instability/neuroticism and openness to experience. Five dimensions explain 52.63% of the variance of *ABPT*. The factor loadings of the five dimensions vary between .36 and .79. Test-retest reliability coefficient was found .85 for extroversion, .86 for agreeableness, .71 for conscientiousness, .85 for emotional instability/neuroticism and .68 for openness to experience. Meanwhile Cronbach Alpha coefficient was found .89 for extroversion, .87 for agreeableness, .88 for

conscientiousness, .73 for emotional instability/neuroticism/neuroticism, and .80 for openness to experience.

*Family Influence on Career Development Scale:* The Family Influence on Career Development Scale adapted by Akın, Usta, and Satici (2012) consists of 22 Likert-type items scored between 1 and 6. The confirmatory factor analysis used for assessing the structural validity of the scale indicated that the four-dimension model has good consistency ( $\chi^2=472.84$ ,  $sd=198$ ,  $p<.00$ ,  $RMSEA=0.062$ ,  $CFI=0.96$ ,  $IFI=0.96$ ,  $RFI=0.92$ ,  $SRMR=0.081$ ). The factor loads of the scale ranged between .34 and .90. For the four sub-scales, the internal consistency reliability coefficients were determined as .93 for information support; .72 for family expectations; .68 for financial support and .86 for values/beliefs. The internal consistency reliability coefficient of the whole scale was .83. The corrected item total correlation of the scale varied between .28 and .84.

#### *Procedure and design*

The predictors of the five factor personality traits were evaluated using hierarchical regression analysis. Hierarchical regression analysis consists of two steps. In the first step, the demographic variables of gender and class/year were taken into consideration. In the second step, the dimensions of family influence on career development (which are information support, family expectations, financial support and values/beliefs) were taken into consideration. Descriptive statistics regarding the study variables were also evaluated in the study.

## **Results**

The study results were evaluated based on the intercorrelation of the study variables and the hierarchical regression analysis. In Table 1 shows the correlation of Family Influence on Career Development Scale's four dimensions (information support, family expectations, financial support and values/beliefs) with the five dimensions (openness to experience, conscientiousness, extraversion, agreeableness and emotional instability/neuroticism) as determined by *Personality Test Based on Adjectives* (ABPT).

Table 1. Pearson correlation of the Dependent and Independent Study Variables. Correlation between Personality Test Based on Adjectives (ABPT) with Family Influence on Career Development Scale

Dimensions	EI/N	E	OE	A	C
Information support	-.02	.29**	.26**	.18**	.19**
Family expectations	.12	.13*	.12*	.14*	.05
Financial support	-.04	.03	.07	.08	.03
Values/beliefs	.00	.09	.07	.23**	.11*
N	336	336	336	336	336

Note: EI/N-Emotional instability/neuroticism; E-Extraversion; OE-Openness to experience; A-Agreeableness; C-Conscientiousness; \* p<.05; \*\*p<.01

As seen in Table 1, significant positive correlations have been observed between Family Influence on Career Development Scale's information support dimension and extraversion ( $r=.29$ ,  $p<.01$ ), openness to experience ( $r=.26$ ,  $p<.01$ ), agreeableness ( $r=.18$ ,  $p<.01$ ), and conscientiousness ( $r=.19$ ,  $p<.01$ ). There is a positive meaningful relationship between family expectations and extraversion ( $r=.13$ ,  $p<.05$ ), openness to experience ( $r=.12$ ,  $p<.05$ ), and agreeableness ( $r=.14$ ,  $p<.05$ ). Also, there is a positive meaningful relationship between values/beliefs and agreeableness ( $r=.23$ ,  $p<.01$ ), and conscientiousness ( $r=.11$ ,  $p<.05$ ).

Table 2. Hierarchical Regression Analysis Results regarding the Effect of the Demographic Variables on the Five Factor Personality Dimensions

Dimensions	R <sup>2</sup>	F	β	t
Emotional instability/neuroticism	0.03	4.76*		
Gender			-0.16	-2.87**
Class Level			0.05	0.96
Extraversion	0.02	2.70		
Gender			-0.11	-1.95
Class Level			-0.08	-1.38
Openness to experience	0.01	1.28		
Gender			-0.03	-0.61
Class Level			-0.08	-1.51
Agreeableness	0.02	4.11*		
Gender			-0.10	-1.81
Class Level			-0.13	-2.32*
Conscientiousness	0.03	4.37*		
Gender			-0.12	-2.23*
Class Level			-0.11	-2.06*

Note: \* p<.05; \*\*p<.01

In Table 2, in the first step of the hierarchical regression analysis, demographic variables such as gender and grade level were evaluated. In the model, which was established to evaluate whether these dimensions predicted the five dimensions of the *Personality Test Based on Adjectives (ABPT)*, the first step was found to contribute to the emotional instability/neuroticism ( $R=0.17$ ;  $R^2=0.03$ ;  $F_{(2, 333)}=4.76$ ;  $p<.05$ ). Of the demographic variables entered in the first step, gender ( $\beta=-0.16$ ;  $p<.01$ ) had a negative and significant effect on emotional instability/neuroticism. Of the demographic variables, grade level ( $\beta=-0.13$ ;  $p<.05$ ) had a negative and significant effect on agreeableness ( $R=0.16$ ;  $R^2=0.02$ ;  $F_{(2, 333)}=4.11$ ;  $p<.05$ ). Gender ( $\beta=-0.12$ ;  $p<.05$ ) and grade level ( $\beta=-0.11$ ;  $p<.05$ ) had a negative and significant effect on conscientiousness ( $R=0.16$ ;  $R^2=0.03$ ;  $F_{(2,333)}=4.37$ ;  $p<.05$ ). Of the demographic variables, gender and grade level are not predictors of openness to experience and extraversion. The first hypothesis was partly supported.

Table 3. Hierarchical Regression Analysis Results regarding the Effect of the Family Influence on Career Development's on the Five Factor Personality Dimensions

Dimensions	R <sup>2</sup>	F	$\beta$	t
Emotional instability/neuroticism	0.02	1.42		
Information support			-0.02	-0.28
Family expectations			0.13	2.28*
Financial support			-0.01	-0.16
Values/beliefs			-0.04	-0.66
Extraversion	0.10	9.03**		
Information support			0.31	5.31**
Family expectations			0.10	1.75
Financial support			-0.07	-1.26
Values/beliefs			-0.01	-0.08
Openness to experience	0.08	6.93**		
Information support			0.26	4.48**
Family expectations			0.10	1.75
Financial support			-0.02	-0.31
Values/beliefs			-0.02	-0.31
Agreeableness	0.08	6.93**		
Information support			0.13	2.22*
Family expectations			0.08	1.32
Financial support			0.03	0.56
Values/beliefs			0.18	3.08**



Table 3. Hierarchical Regression Analysis Results regarding the Effect of the Family Influence on Career Development's on the Five Factor Personality Dimensions - *continued*

Dimensions	R <sup>2</sup>	F	β	t
Conscientiousness	0.04	3.70*		
Information support			0.20	3.28**
Family expectations			0.00	-0.01
Financial support			-0.05	-0.85
Values/beliefs			0.07	1.18

Note: \* p<.05; \*\*p<.01

In Table 3, in the second step of the hierarchical regression analysis, the four dimensions of The Family Influence on Career Development Scale, which were information support, family expectations, financial support and values/beliefs were evaluated. In the model, which was established to evaluate whether these dimensions predicted the five dimensions of the Personality Test Based on Adjectives (ABPT), family expectations ( $\beta=0.13$ ;  $p<.05$ ) was found to have a positive and significant effect on emotional instability/neuroticism ( $R=0.13$ ;  $R^2=0.02$ ,  $F_{(4, 331)}=1.42$ ;  $p>.05$ ). Information support ( $\beta=0.31$ ;  $p<.00$ ) had a positive and significant effect on extraversion ( $R=0.31$ ;  $R^2=0.10$ ;  $F_{(4, 331)}=9.03$ ;  $p<.00$ ). Information support ( $\beta=0.26$ ;  $p<.01$ ) had a positive and significant effect on openness to experience ( $R=0.28$ ;  $R^2=0.08$ ;  $F_{(4, 331)}=6.93$ ;  $p<.01$ ). Significant correlations were found between agreeableness and information support ( $\beta=0.13$ ;  $p<.05$ ) and values/beliefs ( $\beta=0.18$ ;  $p<.01$ ) dimensions ( $R=0.28$ ;  $R^2=0.08$ ;  $F_{(4, 331)}=6.93$ ,  $p<.01$ ). Information support ( $\beta=0.20$ ;  $p<.01$ ) had a positive and significant effect on conscientiousness ( $R=0.21$ ;  $R^2=0.04$ ;  $F_{(4, 331)}=3.70$ ;  $p<.05$ ). The second hypothesis was accepted in a limited manner.

### Conclusions

The study results indicated a medium-level negative relationship between gender and the neuroticism dimension of the Adjective-Based Personality Test in late adolescents. The neuroticism personality trait is an unstable condition/characteristic associated with negative emotions (Eryilmaz & Ogulmus, 2010). The study of Zheng, Lippa, and Zheng (2011) similarly determined that neuroticism varied according to gender and orientation. In line

with the Zheng, Lippa, and Zheng's (2011) study, it is possible to assert that neuroticism - a condition characterized by emotional instability - is negatively correlated with gender (Viswesvaran & Ones, 2003).

In this study, a medium-level negative relationship was identified between the agreeableness personality trait and students' current class/year. Similarly, a medium level negative relationship was also observed between the conscientiousness personality trait and both gender and class/year. In addition, a medium-level positive relationship was identified between the agreeableness and conscientiousness personality traits and the family information support dimension. At the same time, the agreeableness personality trait had a medium-level positive relationship with the family values/beliefs dimension. Rigid, passive and simple societies tend to culturally more conformist and communitarian (Triandis, 1996). In such conformist/communitarian cultures, the demands of the group in which individuals find themselves - such as family and school - have preeminence over personal demands and wishes. On the other hand, in Turkish culture, responsibility (or conscientiousness) is generally deemed a desirable and necessary characteristic in late adolescents. However, an adolescent is a person passing through a period of conflict and instability. Adolescence is period that differs significantly from the other stages of life. During this time, adolescents experience emotional transitions and changes (Horrocks, 1962). In line with these general observations, we determined in our study that higher classes (i.e. increasing age) had a medium-level negative relationship with agreeableness personality trait, while the conscientiousness personality trait had a medium-level negative relationship with gender and class/year. We also observed that the agreeableness and conscientiousness personality traits had a medium-level positive relationship with the family information support dimension, and that the agreeableness personality trait similarly had a medium-level positive relationship with the family values/beliefs dimension. We considered these results to be consistent and acceptable.

On the other hand, we identified a medium-level positive relationship in adolescents between the neuroticism dimension of the Adjective-Based Personality Test and the family expectation dimension of the Family Influence on Career Development scale. These results can be interpreted as a reflection of the demands that families and other social groups place on individuals in Turkish culture, which, in parallel to the adolescents' growing interest in career

development, have the effect of increasing negative and unstable emotions in late adolescents. On the other hand, the extroversion and openness to experience personality traits did not exhibit any relationship with gender and class. Repeating this study with a different study group might help illustrate whether this observation is actually supported by developmental data.

In this study, the agreeableness and openness to experience personality traits have a high level positive relationship with family information support. Adolescents with openness to the experience personality trait have a greater tendency to display characteristics associated with creativity and independence, such as imagination, curiosity, originality and open-mindedness (Viswesvaran & Ones, 2003). In other words, openness to experience is associated with the intellectual nature of the late adolescent. Extroverted late adolescents, on the other hand, are better able to develop their social skills, owing to the reward-seeking behavior they display in social environments (Eryilmaz & Ogulmus, 2010). In Turkish culture, it is possible to say that family information support is considered more preferable and acceptable than other sources of information available to the individual. Consequently, it is not surprising or unexpected that the extroversion and openness to experience personality traits would have a strongly positive relationship with family information support.

#### *Suggestions*

Based on the study results, we can propose the following recommendations:

- Psycho-educational programs can be prepared and implemented to increase family support for late adolescents who experience problems in career development.
- Group psychological consultation can be provided to support personality traits/dimensions in late adolescents experiencing problems in career development.
- Training, regarding the roles of the family in career development, could be prepared and implemented.
- Similar studies, evaluating the inter-relation between personality traits and family influence on career development, could be performed with different study groups, in order to determine whether the findings of these other studies support the current study's results.

- Similar studies, evaluating the inter-relation between personality traits and family influence on career development, could also be performed in different cultures, in order to assess the effect and role of culture.

The most notable limitation of this study is that the sample group consisted of only college students and in the cross-sectional and non-experimental design of the study. Therefore, further studies involving varying age groups or more conservative designs (i.e. at least longitudinal approaches) could be carried out to determine whether their findings support those of the present study, thus contributing to enriching the scholarly literature referring to the career development process.

### References

- Akın, A., Usta, F., & Satici, S. A. (2012). Validity and reliability of Turkish Version of the Family Influence Scale. *Paper presented at the 4th International Congress of Educational Research*, Istanbul, Turkey.
- Bacanlı, H., İlhan, T., & Aslan, S. (2009). Beş Faktör Kuramına dayalı bir kişilik ölçeğinin geliştirilmesi: Sıfatlara Dayalı Kişilik Testi [Development of a personality scale based on Five Factor Theory: Adjective Based Personality Test (ABPT)]. *Türk Eğitim Bilimleri Dergisi [Journal of Educational Sciences]*, 7(2), 261-279.
- Barnett, R. C. (2007). *Understanding the role of pervasive negative gender stereotypes: What can be done?* Heidelberg, Germany: Brandeis University.
- Brown, D. (Ed.). (2002). *Career choice and development* (4th ed.). San Francisco: Jossey-Bass Publishing.
- Brown, M. T. (2004). The career development influence of family of origin: Considerations of race/ethnic group membership and class. *The Counseling Psychologist*, 32(4), 587-595.
- Basım, H. N., Cetin, F., & Tabak, A. (2009). Beş Faktör Kişilik özelliklerinin kişilerarası çatışma çözme yaklaşımlarıyla ilişkisi [The relationship between Big Five Personality characteristics and conflict resolution approaches]. *Türk Psikoloji Dergisi [Turkish Journal of Psychology]*, 24(63), 20-37.

- Chen, S., Fu, C., Li, R., Lou, J., & Yu, H. (2012). Relationships among social support, professional empowerment, and nursing career development of malenurses: A cross-sectional analysis. *Western Journal of Nursing Research, 34*(7), 862-882.
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). New York: Routledge.
- Costa, P. T. Jr., & Widiger, T. A. (Eds.). (2002). *Personality disorders and the five-factor model of personality* (2nd ed.). Washington: American Psychological Association.
- De Raad, B. (2000). *The big five personality factors the psycholexical approach to personality*. Göttingen: Hogrefe & Huber Publishers.
- Erkus, A., & Tabak, A. (2009). Beş faktör kişilik özelliklerinin çalışanların çatışma yönetim tarzlarına etkisi: Savunma sanayinde bir araştırma [The effect of the Five Factor Personality Traits on the conflict management approach of employees: A study in the defense industry]. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi [Ataturk University Journal of Economics and Administrative Sciences], 23*(2), 213-242.
- Eryılmaz, A., & Ogulmus, S. (2010). Ergenlikte öznel iyi oluş ve beş faktörlü kişilik modeli [Subjective well-being and big five personality model at adolescence]. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi [Ahi Evran University Journal of Education], 11*(3), 189-203.
- Falaye, F. W., & Adams, B. T. (2008). An assessment of factors influencing career decisions of in-school youths. *Pakistan Journal of Social Sciences, 5*(3), 222-225.
- Fan, W., Cheung, F. M., Leong, F. T. L., & Cheung, S. F. (2014). Contributions of family factors to career readiness: A cross-cultural comparison. *The Career Development Quarterly, 62*(3), 194-209.
- Flanagan, R., & Malgady, R. G. (2011). Successful graduate students: The roles of personality traits and emotional intelligence. *Psychology in the Schools, 48*(4), 317-331.
- Hairston, J. E. (2000). How parents influence African American students' decisions to prepare for vocational teaching careers. *Journal of Career and Technical Education, 16*(2), 1-15.
- Howard, P. J., & Howard, J. M. (1995). *The big five quickstart: An introduction to the five-factor model of personality for human resource professionals*. North Carolina: Center for Applied Cognitive Studies.

- Johnson, M. K., Rowatt, W. C., & Petrini, L. (2011). A new trait on the market: Honesty-humility as a unique predictor of job performance ratings. *Personality and Individual Differences, 50*, 857-862.
- Kasimati, K. (1991). *Research on the social characteristics of employment*. Athens, Greece: Epanastatiko Kommunistiko Komma Ellados.
- Krüger, M. (2009). The big five of school leadership competences in the Netherlands. *School Leadership and Management, 29*(2), 109-127.
- Kuzgun, Y. (2000). *Meslek danışmanlığı kuramlar uygulamalar [Vocational counseling theories practices]*. Ankara: Nobel Publishing.
- Lounsbury, J. W., Smith, R. M., Levy, J. J., Leong, F. T. L., & Gibson, L. W. (2009). Personality characteristics of business majors as defined by the big five and narrow personality traits. *The Journal of Education for Business, 84*(4), 200-204.
- McCrae, R. R., & Löckenhoff, C. E. (2010). Self-Regulation and the Five-Factor Model of Personality Traits. In R. H. Hoyle (Ed. ), *Handbook of Personality and Self-Regulation* (pp. 145-154). Oxford, UK: Wiley-Blackwell. doi: 10.1002/9781444318111.ch7
- O'Connell, M., & Sheikh, H. (2011). Big Five' personality dimensions and social attainment: Evidence from beyond the campus. *Personality and Individual Differences, 50*, 828-833.
- Orenuga, O. O., & Da Costa, O. O. (2006). Characteristics and study motivation of clinical dental students in Nigerian Universities. *Journal of Dental Education, 70*(9), 996-1003.
- Osoro, B. K., Amundson, N. E., & Borgen, W. A. (2000). Career decision-making of high school students in Kenya. *International Journal for the Advancement of Counselling, 22*(4), 289-300.
- Otto, L. B. (1989). *How to help your child choose a career*. Tallahassee, FL: Florida Department of Education.
- Paloş, R., & Drobot, L. (2010). The impact of family influence on the career choice of adolescents. *Procedia - Social and Behavioral Sciences, 2*(2), 3407-3411.
- Raynor, D. A., & Levine, H. (2009). Associations between the five-factor model of personality and health behaviors among college students. *Journal of American College Health, 58*(1), 73-81.
- Robinson, O., Wright, G. R. T., & Kendall, E. (2011). Parental attachment and its relationship to contextualised trait expression and mean-corrected cross-

- context trait variability. *Personality and Individual Differences*, 50, 547-552.
- Rose, R. C., Ramalu, S. S., Uli, J., & Kumar, N. (2010). Expatriate performance in overseas assignments: The role of Big Five Personality. *Asian Social Science*, 6(9), 104-113.
- Schmitt, D. P., Allik, J., McCrae, R. R., Benet-Martinez, V., Alcalay, L., & Ault, L., et al. (2007). The geographic distribution of big five personality traits patterns and profiles of human self-description across 56 nations. *Journal of Cross-Cultural Psychology*, 38(2), 173-212.
- Tatar, A. (2009). Beş Faktör Kişilik Modeline dayalı olarak sporcu kadın ve erkeklerin kişilik profillerinin karşılaştırılması [The comparison of personality profiles of female and male sportsmen by Five Factor Personality Model]. *Spor Bilimleri Dergisi [Hacettepe Journal of Sports Sciences]*, 20(2), 70-79.
- Tsagala, E., & Kordaki, M. (2005). Essentially factors that affect students' choices to study computer science: Gender differences. *Paper presented at the 7th International Conference for Computer-based Learning in Science*, Zilina, Slovakia.
- Veage, S., Ciarrochi, J., & Heaven, P. C. L. (2011). Importance, pressure, and success: Dimensions of values and their links to personality. *Personality and Individual Differences*, 50, 1180-1185.
- Viswesvaran, C., & Ones, (2003). Measurement error in "big five factors" personality assessment. In B. Thompson (Ed.), *Score reliability-contemporary thinking on reliability issues* (pp. 245-257). California: Sage Publications.
- Volk, S., Thöni, C., & Ruigrok, W. (2011). Personality, personal values and cooperation preferences in public goods games: A longitudinal study. *Personality and Individual Differences*, 50, 810-815.
- Wallen, N. E., & Fraenkel, J. R. (2001). *Educational research a guide to the process*. (2nd ed.). New Jersey: Lawrence Erlbaum Associates Inc.

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