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Personality Traits, Implicit Theories of Intelligence and Academic Performance: Mediating Role of Adaptability

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Abstract: The aim of this study was to investigate the mediating role of adaptability in relation to personality traits (conscientiousness) and implicit beliefs of intelligence with academic outcomes. The research was a descriptive correlational study that model of study was analyzed by structural equation modeling. The research population included all high school students in Shiraz in 2020. 315 high school students (170 girls) and (145 boys) were selected by accessible sampling method. To collect data, the Rhodewalt and Jones Self Handicapping Questionnaire (1982), Student sense of connectedness with school scale (Brew et al., 2004), Adaptability Scale (Martin et al., 2012), Implicit Beliefs Intelligence Scale (Abdolfattah & Yates, 2005), Neo Personality Inventory (Costa and McCurry, 1985) were used. The grade point average of the academic scores was obtained from the participants as a self-report. The results exhibited that conscientiousness have a significant direct effect on academic outcomes (B = .67). Also, the incremental belief (B = .41), entity belief (B = .42) and adaptability (B = .24) have a significant direct effect on academic outcomes. In addition, conscientiousness indirectly affect academic outcomes through adaptability (B = .11). In addition, it was shown that the incremental belief (B = .09) and entity belief (B = .05) have an indirect effect on academic outcomes through adaptability. According to the findings, the model fit indices indicated that the model presented in this study was optimal. In general, when special attention is paid to personality traits and implicit beliefs of intelligence in educational institutions, people's adaptation increases and prepares them for success in educational fields.

Keywords: Academic outcomes, personality traits, implicit beliefs of intelligence, adaptability

Introduction

The educational systems of each country determine the progress of a country in the field of culture and industry; because these systems educate and train experienced and professional human resources for different parts of the society. Therefore, it is necessary to pay special attention to the components that exist in the field of education and training. Educational outcomes that include self-handicapping, sense of belonging to school and academic achievement are among these consequences that can have a significant impact on people's professional and social life.

Every day in schools, we see that students are faced with assignments and situations in which their ability and intelligence are exposed to the judgment of others. Self-handicapping is a strategy that a person uses in a failure situation. Self-handicapping may be used to protect oneself from the personal threat of failure due to low ability or it may be a way to protect one's self-image from the threat of being negatively appraised by others (Lovejoy & Durik, 2010). Therefore, in school, students use self-handicapping strategies a lot (Urdan & Midgley, 2003). Using this strategy a lot can lead to poor

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performance of students in school because this variable has a positive and significant relationship with stress and procrastination variables (Martin, Marsh, Williamson, & Debus, 2003).

The sense of belonging to the school is another motivational feature that can be considered as an important educational outcome. Students who have a high sense of belonging to the school like teachers and other students, are committed to learning their lessons, do homework completely and well, and participate in school activities (McGiboney, 2016). Brew, Beatty, and Watt (2004) consider the school connectedness as a belief held by students that adults and peers in the school care about their learning as well as about them as individuals. It is a feeling of acceptance, respect and support towards the school environment, teachers and classmates. This variable can create the ground for students' high interest in school and lead to their proper performance in the school (Bradley, Ferguson, & Zimmer-Gembeck, 2021).

Humans have always lived in a world that has undergone fundamental changes in various economic, geographical, political, social, cultural, medical and other fields. Therefore, he faces new and unpredictable events and situations daily and these changes can include the school environment, work, marriage, retirement, etc. In school, students face challenges such as academic performance, belonging to school, and self-handicapping. One of the variables that can predict academic performance is adaptability. Adaptability is defined as adjustment in natural and human systems in response to actual or anticipated climatic stimuli or their effects, which regulates injury or exploits useful opportunities (Liem & Martin, 2015). Students who have high adaptability may be better able to cope with the challenges of life and education. Also, researches have determined that adaptability is a positive and significant predictor of class participation, enjoyment of school, positive interactions, self-esteem, life satisfaction and purposefulness (Martin, Nejad, Colmar, & Liem, 2013a). Also, it has been found that psychological well-being increases due to adaptability ((Ramos & Lopez, 2018).

One of the variables that have been considered as antecedents of adaptability in various researches is personality traits (Martin et al., 2013a). Personality traits can be considered stable traits that do not change much from one situation to another. They are stable and durable tendencies to respond in the same way to different stimuli and can be a predictor of a person's behavior in different situations (Schultz & Schultz, 2016). Personality traits include five factors, which include agreeableness, conscientiousness, extraversion, neuroticism, openness to experience (Hengartner, van der Linden, Bohleber, & von Wyl, 2017)). Given that adaptability means that a person can maintain their adaptation in the face of changes (Martin et al., 2013a); Having a certain amount of personality traits such as extroversion which is a sign of being sociable, agreeableness which is considered as acceptance of others, openness to experience which is known as acceptance of new experiences, emotional stability which is considered as adjustment and the control of emotions is considered to be able to lead to cognitive, behavioral and emotional adaptability (Jiang, 2017). According to researches, it has been determined that personality has a significant relationship with academic adaptation (Abood, Alharbi, Mhaidat, & Gazo, 2020), and university adaptation (Abood et al., 2020). It has also been

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determined that the adaptability mediates the relationship between personality traits and academic achievements (Martin et al., 2013a).

Among other variables that have been emphasized as predictors of adaptability are the implicit beliefs of intelligence (Martin et al., 2013a). Implicit intelligence beliefs refer to people's general beliefs about whether their intelligence is a fixed trait (entity belief) or a flexible quality that can be improved through learning and effort (incremental belief) (Blackwell, Trzesniewski, & Dweck, 2007). In addition to the fact that a person makes a certain belief about intelligence; His behavior and emotions are also affected by this belief and this may lead to better adaptability.

Therefore, the aim of the present study is to investigate the mediating role of adaptability in the relationship between personal resources (personality traits and implicit beliefs of intelligence) with academic outcomes (self-handicapping, sense of connectedness with school and academic achievement). The proposed model of the research is shown in Figure 1, in which personality traits and implicit beliefs of intelligence are considered as predictor variables, adaptability as a mediating variable, and self-handicapping, sense of connectedness with school and academic achievement as endogenous variables.

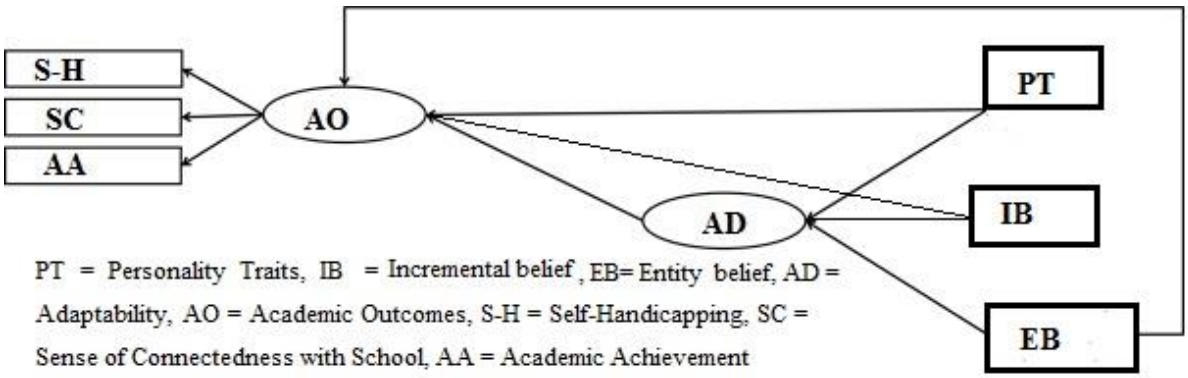

Fig. 1. The proposed model

Material and Methods

The research was applied in terms of purpose and descriptive in terms of data collection, which was carried out by Structural Equations Modeling (SEM). The research population included all high school students of the four educational districts of Shiraz city in 2020. The criterion for selecting participants was based on the ratio of participants to parameters. Since the number of model parameters was 22, 308 people were considered as sample. Therefore, the sample was 315 high school students (170 girls) and (145 boys) in 2020, who were selected by available sampling method and answered the questionnaires online. The participants had informed consent regarding the research implementation

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process and research results. Whenever any of the participants wants to leave the study, they can voluntarily leave the study. Also, at the beginning of the research, written consent was received from all participants.

Instruments

Self-handicapping scale: The self-handicapping scale was designed in 1979 by Edward A. Jones (Strube, 1986). Jones and Rhodewalt designed a revised form of this scale in 1982, which consisted of 25 items that probed respondents' tendencies to use such self-handicaps as lack of effort, illness, procrastination or emotional upset in conjunction with evaluative performances. The scale also included items designed to assess concerns about achievement. In 1990, Rhodewalt re-analyzed the scale's factor structure and found that only 14 items loaded significantly (greater than 0.40) on one of two scale factors. He labelled these factors `excuse making' and `effort'. The excuse making subscale assesses the tendency to make excuses prior to evaluative performances (i.e. a claimed self-handicapping strategy) and the effort subscale taps an individual's willingness to withhold effort in achievement situations (i.e. a behavioral self-handicapping strategy). The scoring of this scale in questions 3, 5, 6, 10, 13, 20, 22 and 23 is reversed. The total score of the scale indicates the level of self-handicapping in such a way that high scores indicate a high level of self-handicapping and low scores indicate a low level of self-handicapping. The maximum score of the respondent is 125 and the minimum score is 25.

Rhodewalt (1990) has reported the reliability of this scale with Cronbach's alpha coefficient of 0.78, and he also obtained a reliability of 0.74 with the test-retest method at an interval of one month. Self-handicapping scale was translated into Farsi by Heidari, Khodapanahi, and Dehghani (2009) and its psychometric properties were investigated. The results of factor analysis showed that the questionnaire has good validity. The reliability of this scale was 0.86 with the test-retest method and 0.76 with the method of internal consistency (Cronbach's alpha) for the total scale. In the present study, the reliability of this scale was obtained through Cronbach's alpha of 0.67.

Students' sense of connectedness with school scale: This scale was designed by Brew et al. (2004). This questionnaire includes 27 items and 6 components of feeling of belonging to peers, teacher's support, feeling of respect and justice in school, participation in society, personal connection with school and student's feeling of participation with school. The scoring of this questionnaire is based on a Likert scale from completely disagree (1) to completely agree (4). Brew et al. (2004) have reported the presence of six factors in the questionnaire to determine the validity using the factor analysis method, and in the reliability check using the Cronbach's alpha for the total questionnaire of 0.97. Also, Makian and Kalantarkoosheh (2015) investigated the reliability of the questionnaire using Cronbach's alpha method for the total scale of 0.88. In the present study, Cronbach's alpha method was used to check the reliability, and the reliability for the whole scale was 0.92.

Adaptability scale: The adaptability scale (Martin, Nejad, Colmar, & Liem, 2013b) was used to measure adaptability. This scale consists of 9 items, which consisted three adaptation factors including cognitive (3 items) (1 to 3), behavioral (3 items) (4 to 6) and emotional (3 items) (7 to 9). This

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questionnaire has a seven-point Likert scale from 1 (completely disagree) to 7 (completely agree). In the validity check using the factor analysis method, the presence of three factors was confirmed, and in the reliability check of this scale using the Cronbach's alpha method, the coefficient was reported as 0.92 (Martin et al., 2013b). Zakari and Yousefi (2017) using Cronbach's alpha obtained reliability coefficients of 0.89, 0.83, 0.87 and 0.93 respectively for the cognitive, behavioral, emotional dimensions and the total scale. In the present study, the total reliability of the scale was 0.88.

Implicit theory of intelligence scale: The scale of implicit theory of intelligence was compiled by Abd-El-Fattah and Yates (2005) based on the implicit theories of intelligence (Blackwell et al., 2007). This scale includes 14 items, and two subscales of the inherent theory of intelligence (fixed belief of intelligence) including 7 items (items 1 to 7) and the incremental theory of intelligence (incremental belief of intelligence) also include 7 items (items 8 to 14). The scoring of this scale is based on a 5-point Likert scale from strongly disagree (1) to strongly agree (5). Abd-El-Fattah and Yates (2005) have reported coefficients of 0.82 and 0.74 for the subscales of incremental theory of intelligence and inherent theory of intelligence, respectively, using Cronbach's alpha method. Using Cronbach's alpha, Mohebbi, Shehni, and Sharifi (2013) obtained a coefficient of 0.74 for the subscale of the inherent belief in intelligence and a coefficient of 0.82 for the subscale of the incremental belief in intelligence. In the present study, the reliability for the subscales of belief in the incremental nature of intelligence was 0.86 and the inherent belief in intelligence was 0.71.

Neo Personality Inventory: This inventory was designed by Costa and McCrae (1992) and includes 60 items that include the five factors of agreeableness (A), neuroticism (N), openness to experience (O), extraversion (E) and conscientiousness (C). And each factor has 12 items. The scoring of this questionnaire is of the Likert type, which is graded in a spectrum of five from completely disagree (score 0) to completely agree (score 4). McCrae, Costa, and Martin (2005) reported the reliability of the questionnaire using Cronbach's alpha method for conscientiousness, agreeableness, openness to experience, extroversion and neuroticism coefficients were 0.79, 0.79, 0.80, 0.75 and 83 respectively. Garousi Farshi, Mehryar, and Ghazi Tabatabaei (2001) in the standardization of this questionnaire obtained the correlation coefficients of 5 subscales between 0.56 and 0.87; They also reported Cronbach's alpha coefficients in the range between 0.56 and 0.87. In the present study, the reliability of the neuroticism subscales was 0.84, extraversion 0.78, openness 0.64, agreeableness 0.70, and conscientiousness 0.78. Since the conscientiousness is the strongest predictor of all five traits for academic performance (Dumfart & Neubauer, 2016), we analyze just this variable as personality trait in present study.

Academic achievement: The average of academic achievement is the mean of grades of students at the end of the year, which ranges from 0 to 20.

To check the research data, descriptive statistics of mean, standard deviation, minimum score and maximum score, Kolmogorov–Smirnov test was used to check the normality of the data and Pearson correlation test, path analysis test and model fit test were used to test the research hypotheses. SPSS-24 and LISREL-10-2 was used to perform statistical analysis.

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Results

Table 1 shows the mean, standard deviation, minimum score and maximum score of the research variables.

Table 1. Descriptive indexes of research variables

Variable		Mean	SD	Min.	Max.	Skewness	Kurtosis
Personality traits	Neuroticism	16.54	8.17	3	40	0.60	-0.08
	Extraversion	28.68	7.11	6	40	-0.60	0.45
	Openness	20.93	4.75	5	35	0.02	0.38
	Agreeableness	29.04	6.27	9	44	-0.37	0.54
	Conscientiousness	37.78	7.30	9	48	-0.70	0.88
Implicit intelligence beliefs	Incremental belief	24.65	4.65	7	30	-0.65	0.01
	Entity belief	8.64	3.67	4	20	0.67	0.16
Adoptability	Cognitive	12.41	2.30	4	15	-0.40	0.65
	Behavioral	12.31	2.12	6	15	-0.50	0.71
	Emotional	120.6	2.44	3	15	-0.55	0.77
Academic outcomes	Self-handicapping	31.55	7.39	16	54	0.36	-0.05
	Sense of connectedness with school	82.35	13.04	46	105	-0.22	-0.77
	GPA	18.37	1.70	12	20	-0.09	0.09

According to Table 1, the skewness and kurtosis of the data are not more than ±1. The independence of the data was checked and confirmed with Durbin-Watson test (2.05). Also, for a more accurate examination of multicollinearity, variance inflation (VIF) indices were calculated, which were not smaller than the limit of 0.1 and the values of the tolerance index were not larger than the limit of 5. In addition, in checking the normality of the variables, it was found that all the variables are normal. Table 2 shows the correlation matrix of the research variables.

Table 2. Correlation matrix of research variables

Variable	1	2	3	4
1. Conscientiousness	-			
2. Entity belief	0.46**	-		
3. Incremental belief	0.33**	0.29**	–	
4. Adoptability	0.50**	0.19**	0.43**	–
5. Academic outcomes	0.27**	0.10	0.43**	0.30**

** < 0.01

According to Table 2, the relationships between predictor, mediator and criterion variables are significant. The range of correlation coefficients between all variables is from 0.14 to 0.58. The fit indices of the final model include absolute indices (Chi-square and Root Mean Squared Error of Approximation), relative indices (Comparative Fit Index, Normed Fit Index, Incremental Fit Index, Relative Fit Index and Tucker-Lewis Index) and parsimonious indices (Adjusted Goodness-of-Fit Index) are reported in Table 3. These indicators show that before the model modification, the model did not have a good fit, while after the modifications; the model fit has been improved. Direct, indirect

effects and significance level are reported in Table 4. According to Table 4, all direct and indirect paths are significant. In other words, conscientiousness, incremental belief and entity belief are related directly and through adaptability with academic outcomes.

Table 3. Model fit indices

Model	X^2/df	P	CFI	NFI	IFI	RFI	TLI	AGFI	RMSEA	PCLOSE
Initial	2.16	0.001	0.89	0.82	0.89	0.80	0.88	0.85	0.08	0.001
Modified	1.93	0.001	0.95	0.90	0.95	0.86	0.93	0.88	0.05	0.21

Table 4. Direct, indirect effects and significance level

Path	Direct effect	Indirect effect	P
Conscientiousness to academic outcomes	0.67	-	0.001
Incremental belief to academic outcomes	0.41	-	0.001
Entity belief to academic outcomes	0.42	-	0.001
Conscientiousness to adaptability	0.45	-	0.001
Incremental belief to adaptability	0.39	-	0.001
Entity belief to adaptability	0.20	-	0.001
Adaptability to academic outcomes	0.24	-	0.001
Conscientiousness to academic outcomes through adaptability	-	0.11	0.005
Incremental belief to academic outcomes through adaptability	-	0.09	0.01
Entity belief to academic outcomes through adaptability	-	0.05	0.05

Discussion

The aim of the present study was to examine the mediating role of adaptability in the relationship between personal resources (personality traits and implicit beliefs of intelligence) and academic outcomes (self-handicapping, sense of belonging to school and academic achievement). According to the findings, adaptability mediated the relationship between personality traits (conscientiousness), incremental belief and entity belief with academic outcomes. Also, the findings revealed that conscientiousness through adaptability has a greater effect on academic outcomes compared to the implicit beliefs of intelligence. In addition, the findings showed that incremental belief through adaptability has a greater effect on academic outcomes compared to entity belief. These findings mean that conscientiousness and incremental belief by creating more adaptability in students provides the basis for better academic outcomes. The findings are consistent with the researches of Martin et al. (2013a), Liem and Martin (2015), Yeager et al. (2014) and Leroy, Bressoux, Sarrazin, and Trouilloud (2007).

When people have characteristics such as emotional stability, extroversion, openness, conscientiousness, and agreeableness, the ground for adaptation is provided (Schultz & Schultz, 2016); Because these characteristics are necessary for a person's acceptance and adaptation in different situations (Liem & Martin, 2015). Believing in the increase of intelligence also makes a person more

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flexible. In other words, by having this belief, a person emphasizes that people can increase their intelligence by trying and practicing and can improve own performance.

In the case of the entity belief, considering that a part of human intelligence and ability is determined through genetics and hereditary and it cannot be increased or decreased through appropriate or inappropriate education and training. Having the belief that part of human intelligence is determined through innateness; it gives a person the knowledge that he has enough talent and innate intelligence and when he faces failure, she/he believes that she/he has innate intelligence and as a result, she/he is not disappointed. Therefore, this causes him to experience adaptability and ultimately experience academic achievement.

It should be noted that when talking about personality, cognition, emotion and behavior are considered (Schultz & Schultz, 2016), but when we talk about intelligence beliefs, it is more about the cognitive dimension. In other words, the person's thoughts are considered. Therefore, it is expected that personality traits have a greater impact than intelligence beliefs through adaptability on academic performance.

Due to the spread of the Corona virus and the increase in virtual education and teaching in all schools, it has led to limitations in data collection. Also, due to the fact that the statistical population and the sample of the current study are high school students, it should be careful in generalizing it to other samples.

The findings of this research can contain important information for parents and teachers. Based on this, it is suggested to parents and teachers to provide situations in order to increase their adaptability and improve their academic performance by considering the personality traits and implicit beliefs of intelligence in students.

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References

Abd-El-Fattah, S., & Yates, G. (2005). Implicit theory of intelligence scale: testing for factorial invariance and mean structure. Retrieved from www.aare.edu/06pap/abd06289.pdf

Abood, M. H., Alharbi, B. H., Mhaidat, F., & Gazo, A. M. (2020). The Relationship between Personality Traits, Academic Self-Efficacy and Academic Adaptation among University Students in Jordan. *International Journal of Higher Education*, *9*(3), 120-128.

[Downloaded from ieepj.hormozgan.ac.ir on 2026-11-10]

[DOR: 20.1001.1.25884395.2022.4.2.11.3]

[DOI: 10.52547/ieepj.4.2.311]

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child development, 78*(1), 246-263.

Bradley, G. L., Ferguson, S., & Zimmer-Gembeck, M. J. (2021). Parental support, peer support and school connectedness as foundations for student engagement and academic achievement in Australian youth. In *Handbook of positive youth development* (pp. 219-236): Springer.

Brew, C., Beatty, B., & Watt, A. (2004). *Measuring students' sense of connectedness with school.* Paper presented at the Australian Association for Research in Education Annual Conference, Melbourne.

Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO Personality Inventory. *Psychological assessment, 4*(1), 5.

Dumfart, B., & Neubauer, A. C. (2016). Conscientiousness is the most powerful noncognitive predictor of school achievement in adolescents. *Journal of individual Differences, 37*(1), 8-15.

Garousi Farshi, M. T., Mehryar, A. H., & Ghazi Tabatabaei, M. (2001). Application of the neop i-r test and analytic evaluation of it"s characteristics and factorial structure among iranian university students. *JOURNAL OF HUMANITIES, 11*(39), 173-198.

Heidari, M., Khodapanahi, M. K., & Dehghani, M. (2009). Psychometric examination of self-handicapping scale (shs). *Journal of Research in Behavioural Sciences, 7*(2 (14)), 97-106.

Hengartner, M. P., van der Linden, D., Bohleber, L., & von Wyl, A. (2017). Big five personality traits and the general factor of personality as moderators of stress and coping reactions following an emergency alarm on a Swiss University Campus. *Stress and Health, 33*(1), 35-44.

Jiang, Z. (2017). Proactive personality and career adaptability: The role of thriving at work. *Journal of Vocational Behavior, 98*, 85-97.

Leroy, N., Bressoux, P., Sarrazin, P., & Trouilloud, D. (2007). Impact of teachers' implicit theories and perceived pressures on the establishment of an autonomy supportive climate. *European journal of psychology of education, 22*(4), 529-545.

Liem, G. A. D., & Martin, A. J. (2015). Young people's responses to environmental issues: Exploring the roles of adaptability and personality. *Personality and Individual Differences, 79*, 91-97.

Lovejoy, C. M., & Durik, A. M. (2010). Self-handicapping: The interplay between self-set and assigned achievement goals. *Motivation and emotion, 34*(3), 242-252.

Makian, R., & Kalantarkoosheh, M. (2015). Normalizing Sense of Belonging to School Questionnaire and its relationship with Academic Burnout and Achievement Motivation among Persian students. *Quarterly of Educational Measurement, 5*(20), 119-138. doi:10.22054/jem.2015.1790

Martin, A. J., Marsh, H. W., Williamson, A., & Debus, R. L. (2003). Self-handicapping, defensive pessimism, and goal orientation: A qualitative study of university students. *Journal of Educational Psychology, 95*(3), 617.

[Downloaded from ieepj.hormozgan.ac.ir on 2026-11-10]

[DOR: 20.1001.1.25884395.2022.4.2.11.3]

[DOI: 10.52547/ieepj.4.2.311]

Martin, A. J., Nejad, H. G., Colmar, S., & Liem, G. A. D. (2013a). Adaptability: How students' responses to uncertainty and novelty predict their academic and non-academic outcomes. *Journal of Educational Psychology, 105*(3), 728.

Martin, A. J., Nejad, H. G., Colmar, S., & Liem, G. A. D. (2013b). Adaptability: How students' responses to uncertainty and novelty predict their academic and non-academic outcomes. *Journal of Educational Psychology, 105*(3), 728-746.

McCrae, R. R., Costa, J., Paul T, & Martin, T. A. (2005). The NEO–PI–3: A more readable revised NEO personality inventory. *Journal of personality assessment, 84*(3), 261-270.

McGiboney, G. W. (2016). *The psychology of school climate*: Cambridge Scholars Publishing.

Mohebbi, M., Shehni, M., & Sharifi, H. (2013). Investigating the Psychometric Properties of Implicit Theory of Intelligence Scale (ITIS) in a Student Society. *Quarterly of Educational Measurement, 4*(14), 43-64.

Ramos, K., & Lopez, F. G. (2018). Attachment security and career adaptability as predictors of subjective well-being among career transitioners. *Journal of Vocational Behavior, 104*, 72-85.

Rhodewalt, F. (1990). Self-handicappers. In *Self-Handicapping* (pp. 69-106): Springer.

Schultz, D. P., & Schultz, S. E. (2016). *Theories of personality*: Cengage Learning.

Strube, M. J. (1986). An analysis of the self-handicapping scale. *Basic and Applied social psychology, 7*(3), 211-224.

Urdan, T., & Midgley, C. (2003). Changes in the perceived classroom goal structure and pattern of adaptive learning during early adolescence. *Contemporary educational psychology, 28*(4), 524-551.

Yeager, D. S., Johnson, R., Spitzer, B. J., Trzesniewski, K. H., Powers, J., & Dweck, C. S. (2014). The far-reaching effects of believing people can change: implicit theories of personality shape stress, health, and achievement during adolescence. *Journal of personality and social psychology, 106*(6), 867.

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[DOR: 20.1001.1.25884395.2022.4.2.11.3]

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