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THE RELATIONSHIP PATTERN BETWEEN PERSONALITY TRAITS AND LEARNING RESPONSIBILITY

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Abstract

As the interest in the shift from teacher–centred paradigm to student–centred learning pedagogies has increasingly grown in popularity nowadays, it should come as no surprise that scholars and academicians have given their attention to the concept of self–engagement in the learning process. In an attempt to explore the role of personality in self–engagement, this paper aims to assess the relationship pattern between individuals' personality traits and their learning responsibility. A total of 358 students attending a university were recruited for the study. The Ten–Item Personality Inventory (TIPI) and The Learning Responsibility Scale were administered. The findings revealed that learning responsibility correlates positively with emotional stability, conscientiousness, and agreeableness. However, the associations between extraversion and openness with learning responsibility are negative and not significant. The findings have also demonstrated that although agreeableness does not display a significant predictive power, both emotional stability and conscientiousness have a significant influence on learning responsibility.

Keywords: *personality traits, learning responsibility, student–centred learning, individual differences, The Big Five*

Introduction

Academics have focused on comprehending the processes of self–learning due to the rising interest in self–engagement in the learning process. As the interest in the shift from teacher–centred paradigm, predicated on the implicit belief that knowledge could be readily transmitted from the teacher's mind to the learner's (Bodner, 1986), to student–centred learning pedagogies has increasingly grown in popularity in the field of education (Lea et al., 2003; O'Neill & McMahon, 2005; Taylor, 2013), it should come as no surprise that scholars and academicians have given their attention to the concept of self–engagement in the learning process. Although being an elusive concept to define, student–centred learning highlights approaches to teaching and learning that prioritize the responsibility and involvement of students in the learning process over the actions of the teacher (Lea et al., 2003). Student–centred approach epistemologically has roots in a constructivist philosophy, emphasizing learners' active engagement in constructing their own knowledge (Dinata et al., 2023; Dunbar & Yadav, 2022; Mraougkas, 2023) and suggesting learners to organize their own schedules in the learning process (Augustini et al., 2021), where learners construct and learn their understanding, collect and process data, compare it to previously collected data, and update regulations (Golder, 2018) rather than repeating back to themselves what they have been told or read (Bodner, 1986; von Glasersfeld, 1995).

It is argued that self–regulation and the construction of cognitive frameworks through abstraction and reflection are prerequisites for the constructivist viewpoint (von Glasersfeld, 1995). The term "self–regulation" here describes the capability of students to comprehend

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and regulate their own learning environments (Schraw et al., 2006), and emphasizes the idea that learners possessing awareness, efficient learning skills, and taking responsibility for their learning process as well as activities would yield positive learning results (Augustini et al., 2021). Dividing the self–regulated learning perspective into categories such as self–efficacy perceptions, commitment to attain the given goal, and strategy use, Zimmerman (1986) suggests that when students actively participate in their own learning process metacognitively, motivationally, and behaviourally, they can be said to be self–regulated, and instead of depending on instructors, peers, or others, these pupils take the initiative and lead their own attempts to learn novel abilities and knowledge.

A review of literature suggests that effective learning takes place when the learners apply not only proper techniques or study skills but also positive attitudes for learning, a strong drive, and self–regulated behaviours (Erişti, 2017; Ning & Downing, 2012). Self–regulated learning establishes a base by allowing individuals to take charge of their learning process, including goal planning, effective time management, and progress tracking (Etkin, 2018; Nilson, 2013; Oates, 2019; Zimmerman, 2002), instead of being taught by the instructor, who is the principal figure, the "sage on stage," possessing knowledge and imparting it to the learners (King, 1993). Defining self–regulated learning as a process where learners establish or set objectives for their own learning path, Pintrich (2000) has highlighted the involvement of monitoring, regulating, and managing cognitive processes. As learners become more adept at self–regulation, they are likely to recognize and realise the benefits of taking responsibility and being in charge of their own learning. Individuals' learning responsibility is fostered when they take charge of their educational path while discovering to observe, assess, and adapt the ways in which they learn, given that through actively seeking answers and adjusting their techniques to match their learning needs, learners actively seek out solutions and develop a sense of accountability. This sense of accountability or responsibility for one's own learning, as suggested by Ayish and Deveci (2019), appears to be vital for school, personal, and professional advancement as well as achievement.

Learning responsibility, in this respect, can be defined as making attempts to learn, upholding and sustaining this responsibility, and examining the process of learning by assessing its outcomes (Gökdağ Baltaoğlu & Güven, 2020). However, as Allan (2006) has pointed out, a review of the literature indicates that the term has been included in various concepts and structures, such as "self–directed learning", "autonomous learning," "self–controlled learning," "self–regulated learning" and so on. To Allan (2006), although the construct has been described in a variety of ways, it essentially encompasses certain characteristics such as personal autonomy along with self–regulated learning, participating in the learning process in an active way, which involves taking initiative, embracing and taking responsibility for the consequences, and finally independent learning. In spite of the various interpretations of the term, it essentially encompasses certain characteristics such as figuring out learning objectives, analysing one's own methods of learning, encouraging oneself to learn and be committed to learning, collaborating with peers, and developing novel strategies when goals set are not met (Gökdağ Baltaoğlu & Güven, 2020).

In the learning process, both non–cognitive elements like personality and cognitive elements like skills and general intelligence play crucial roles. As Barros et al. (2021) assert, when academic levels increase, personality tests get more predictive power while cognitive skills tests lose predictive power, and the way that students interact with their academic settings can be influenced by specific personality factors, which can have an impact on how skills and academic achievement are related. According to Mathews et al. (2006), personality is important in children's school experiences, given that it influences classroom conduct, contributes to academic achievement, and shapes relationships with classmates and instructors. The authors conclude that even in the classroom, students engage in much more than just studying. They

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are driven to react differently to pressures and life events, manage their learning objectives, try to deal with academic and interpersonal challenges, and reflect on their own accomplishments and mistakes. Different personality traits have varied effects on various mental processes that regulate a student's well–being, social skills, and academic performance. Therefore, certain personality traits can influence how students engage with their academic environments, affecting the relationship between skills and academic success (Eilam et al., 2009; Swanberg & Martinsen, 2009). Allan (2006) expanded on this by emphasizing qualities like personal autonomy and self–regulated learning as essential to taking responsibility for one's learning path. Thus, personal traits and developing a sense of responsibility are closely related since an individual's personality has a significant effect on how they perceive, embrace, and carry out their commitments. Following the development of the five–factor model of personality, commonly known as the "Big Five," and the qualities of which have been identified as openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, a significant association has been shown between personality and learning (Angelini, 2023; Feist, 1998; Swanberg & Martinsen, 2009). A review of literature has also revealed the associations between personality traits and academic performance (Cao & Meng, 2020; De Feyter et al., 2012), academic motivation (Clark & Schroth, 2010); emotion regulation strategies (Barańczuk, 2019); learning performance (Smiderle et al., 2020); academic self–efficacy (Rivers, 2021); emotional intelligence (Rosales–Pérez et al., 2021), and so on.

To Cazan and Schiopca (2014), self–directed learning, or learning responsibility as termed in Allan's (2006) study, is a skill that can be developed by all learners, however, to varying degrees depending on personality factors ranging from motivation, self–confidence, conscientiousness, openness to new experiences, to other traits. Bidjerano and Yun Dai (2007) expanded on this and asserted that "Big Five" traits can be applied through self–regulatory inclinations and behaviours by illustrating that conscientiousness, for instance, encompasses dependability and accountability, as well as the capacity to plan, organize, and persevere in pursuit of success. Hence, acceptance of the relationship between personality traits and learning responsibility is essential to appreciating the variations among individuals in how they approach and carry out their duties throughout a range of life domains. Although the capacity to perceive and fulfil obligations is included in the idea of responsibility, it is acknowledged that personality traits have a substantial influence on an individual's tendency toward responsible action. Examining such a relationship could provide a detailed comprehension of the basic principles that urge responsible conduct. It would be possible, in this way, to grasp the fundamental underlying mechanisms by exploring how personality traits impact the formation and development of learning responsibility. To illustrate, as De Feyter et al. (2012) and Swanberg and Martinsen (2009) argued, it is thought that personality traits, such as conscientiousness and neuroticism could be highly related to performance and point out that those possessing a strong sense of conscientiousness could be better organized and self–driven, which would allow them to carry out their duties more regularly and effectively. On the other hand, as they believe they have less influence over the outcome, those who have a stronger external locus of control may find it challenging to accept responsibility. Additionally, exploring the relationship patterns between personality traits and learning responsibility may have practical implications for educational settings through comprehending how various personality types react to interventions meant to foster responsibility in the learning process. In this way, it would be likely to customize learning designs and appropriate interventions to meet the different needs of people with diverse personality types, which would enhance their ability to conduct themselves more responsibly. In conclusion, it is evaluated that research into the connection between personality traits and learning responsibility could have the potential to advance theoretical knowledge as well as real–world applications in educational settings. Through the clarification of the complex and multifaceted interactions among these variables, it would be possible to support initiatives

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that attempt to encourage taking responsibility and personal growth in a variety of settings in educational contexts. Considering the aforementioned, this study is thought to close a gap in the literature by analysing possible specific associations between certain personality traits and learning responsibility. To be more precise, the aim of this study was to explore the relationship pattern between personality traits and learning responsibility. The research questions are as follows:

1. What is the relationship between students' perceived learning responsibility and several personality traits, including openness to experiences, agreeableness, emotional stability, conscientiousness, and extraversion?
2. Do personality traits predict students' feeling of learning responsibility?

Research Methodology

Research Design

In the current study, a correlational research design was employed to explore and investigate the associations between learning responsibility and personality traits. The correlational approach, which involves measuring two or more variables and evaluating their connection, was used in an effort to examine links between variables. The primary goal is to determine whether and to what extent changes in one variable are associated with changes in another variable.

Participants

Applying the random sampling method, 358 students attending a university were recruited for the study in the 2022–2023 academic year in İstanbul. The participants were invited to give responses to the scales online with the assurance that their answers would remain confidential, and that participation was voluntary. Data for 12 respondents were removed in view of insufficient marking. A total of 346 (61% male, 39% female) participants completed the data collection tools. Table 1 presents the demographic features of the students recruited for the study.

Researchers may have used a specific sampling method (e.g., random sampling, stratified sampling) to ensure that participants are selected in an unbiased manner from the target population.

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Table 1
Participant's Demographic Characteristics

Demographic Information		*f*	%
Gender	Female	136	39
	Male	210	61
Age	18–20	270	78
	21–23	70	20
	24–26	6	1.8
	27+	–	0
Department	Faculty of Machinery	87	25
	Faculty of Civil Engineering	67	19
	Faculty of Chemistry and Metallurgy	71	21
	Faculty of Economics and Administrative Sciences	44	13
	Faculty of Naval Architecture and Maritime	36	10
	Faculty of Arts and Sciences	41	12
Total		346	100

Data Collection Tools

The Ten–Item Personality Scale

Five major personality traits are measured by the Ten–Item Personality Scale, which was initially developed by Gosling et al. (2003) and translated into Turkish by Atak (2013). Consisting of 10 items, the 7–point scale has five sub–dimensions: openness to experiences, agreeableness, emotional stability, conscientiousness, and extraversion. The internal consistencies of the dimensions were calculated at .83, .81, .83, .84, and .86, respectively. Ten items and a five–factor model explaining 65.21% of the variance were produced using exploratory component analysis and language validity (correlations between 0.92 and 0.97) (Atak, 2013).

The Learning Responsibility Scale

Developed by Erişti (2017), the 28–item learning responsibility scale is divided into four subcategories, including preparing for learning (seven items), active involvement in learning (nine items), monitoring learning outcomes (eight items), and enhancing learning (four items). With four components and 28 items, the explanatory power was found to be around 54% of the total variance, explaining the behaviors related to learning responsibility ($\chi 2$: 6856,93, df: 351; $p < .000$). According to the factor–based analysis, the subcategories had .86, .86, .81 and .75 reliability levels. The reliability coefficient obtained for the whole scale is $\alpha = .92$.

Data Analysis

Correlational analysis was employed to examine the link between personality traits and the learning responsibilities of the participants. The data from this study were analysed using the SPSS 21.00 software program. Regression analysis, which enables researchers to comment on the variance in the dependent variable caused by the independent variable, was also carried out

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in order to identify and explain the predictive power of the independent variables (personality traits) over the dependent variable (learning responsibility).

Research Results

Before the correlation and regression analysis, the Skewness and Kurtosis test of the variables were conducted to ensure that the data set displayed normal distribution. Table 2 presents the values of the Skewness and Kurtosis test of the variables.

Table 2
The Skewness and Kurtosis Test of the Variables

Descriptive Statistics					
	N	Skewness		Kurtosis	
		Statistic	*SE*	Statistic	*SE*
Learning Resp.	346	–.421	.298	0.088	.470
Openness	346	–.109	.283	1.089	.372
Agreeableness	346	–.132	.238	–.631	.476
Emotional Stab.	346	.197	.209	.287	.378
Conscientiousness	346	–.314	.215	–.754	.366
Extraversion	346	–.995	.238	1.380	.472

As seen in Table 2, the values of the variables regarding the Skewness and Kurtosis test demonstrate that the data set displays a normal distribution.
In Table 3, the values of descriptive statistics for dependent and independent variables are presented.

Table 3
The Values of Descriptive Statistics of Variables

Variables	*n*	*M*	*SE*	*s*
Learning Resp.	346	88.20	1.38	14.01
Openness	346	7.14	.17	1.80
Agreeableness	346	9.93	.21	2.15
Emotional Stab.	346	8.14	.19	1.97
Conscientiousness	346	11.38	.18	1.84
Extraversion	346	7.81	.16	1.69

As Table 3 illustrates, the arithmetic means of learning responsibility, openness, agreeableness, emotional stability, conscientiousness, and extraversion range from 7.81 to 88.20. The standard deviations of the variables are 14.01, 1.80, 2.15., 1.97, 1.84, and 1.69, respectively. Variable standard errors vary from .16 to 1.38.

In Table 4, the correlation values of learning responsibility, openness, agreeableness, emotional stability, conscientiousness and extraversion are illustrated.

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Table 4
The Correlation Analysis among Variables

Variables	1	2	3	4	5	6
1. Learning Responsibility	1					
2. Openness	–.03	1				
3. Agreeableness	.22*	–.01	1			
4. Emotional stability	.25*	.02	.16	1		
5. Conscientiousness	.22*	–.09	–.02	–.05	1	
6. Extraversion	–.15	.13	.18	.14	–.03	1
N	346	346	346	346	346	346

$p < .05$

The correlation values among the variables involved in the study are presented in Table 4. As seen, learning responsibility correlates positively with emotional stability (r = .25; p < 0.05), conscientiousness ($r = .22$; $p < .05$), and agreeableness ($r = .22$; $p < .05$). On the other hand, the associations between extraversion and openness with learning responsibility are negative and not statistically significant. Similarly, the relationships between the Big Five personality traits do not correlate with each other significantly.

Regression analysis was carried out after examining the relationship between learning responsibility, openness, agreeableness, emotional stability, conscientiousness, and extraversion. As learning responsibility correlates positively with emotional stability ($r = .25$; $p < .05$), conscientiousness ($r = .22$; $p < .05$), and agreeableness, Table 5 presents the predictive power of emotional stability, conscientiousness, and agreeableness over learning responsibility as the dependent variable.

Table 5
The Regression Analysis for Predicting Learning Responsibility

Variable	*B*	*SE*	*β*	*t*	*p*
Constant	41.29	11.04	–	3.74	.0001
Agreeableness	.778	.609	.115	1.73	.206
Emotional stability	2.214	.641	.315	3.45	.001*
Conscientiousness	1.891	.714	.241	2.64	.009*
$R = .42$	$R^2 = .28$	$p < .05$			

Table 5 gives details on the regression model's independent variables' coefficients, standard errors, and degrees of significance with respect to the dependent variable. The findings show that emotional stability and conscientiousness explain 42% of the total variance in learning responsibility. Although agreeableness does not display a statistically significant predictive power, it is seen that both emotional stability (ß = .31; $p < .05$) and conscientiousness (ß = .24; $p < .05$) have statistically significant influence over the dependent variable, learning responsibility.

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Discussion

The aim of the current study was to gain a deeper understanding of the pattern of relationships between personality traits and learning responsibility. Through the analysis, it is aimed at offering a thorough grasp of the ways in which different personality traits influence people's inclination to assume responsibility in educational settings. The findings have indicated several remarkable points to consider. Firstly, it was shown that learning responsibility correlates positively with emotional stability, conscientiousness, and agreeableness. On the other hand, the associations between extraversion and openness with learning responsibility are negative and not statistically significant. The findings have also revealed that although agreeableness does not display a statistically significant predictive power, both emotional stability and conscientiousness have a statistically significant influence on learning responsibility. The interpretation of these findings is based on the relatively limited available research on the issue in question.

As for the significant correlation between emotional stability and learning responsibility, expressed in the first research question, it can be stated that individuals with better emotional stability tend to be more resilient and have the capacity to maintain calm under pressure, and they also take more responsibility for their academic pursuits. As Leong (2022) suggests, individuals with higher levels of emotional stability are better equipped to overcome obstacles by focusing on reality, clear judgment, and critical assessment. In other words, people with emotional stability are able to build a holistic and comprehensive perspective on life's challenges (Chaturvedi & Chander, 2010). Although Cazan and Schiopca (2014) found no association between emotional stability and self–directed learning, which is also referred to as learning responsibility, the findings of a study conducted by Smith et al. (2021) revealed that emotionally stable learners were more motivated in studying, and they were more likely to have more goal–oriented behaviours.

In a similar vein, that conscientiousness is positively related to learning responsibility also illustrates the fact that those who score highly on conscientiousness are more likely to take responsibility for their learning processes and exhibit qualities like organization, discipline, and perseverance. As De Feyter et al. (2012) suggest, learners who are conscientious work in an organized, straightforward, and accurate manner, which paves the way for significantly improved performance on tests or in other assessment procedures. As conscientiousness represents qualities like the urge for achievement, devotion to work (Costa et al., 1991); self–control, responsibility, industriousness, well–organization, complying with rules (Roberts et al., 2014); higher academic achievement (Conrad & Patry, 2012; Noftle & Robins, 2007); motivation (Bidjerano & Yun Dai, 2007), and deep learning (Diseth, 2003), the term itself is closely connected to learning responsibility. This indicates that conscientious individuals are more likely to establish learning objectives, organize their study schedules, and use effective time management in an academic setting. In addition, they display high levels of perseverance that allow them to focus on their academic objectives in spite of interruptions and diversions, in that they have a higher probability of avoiding procrastination and continuing to work steadily toward their learning goals. As Annuar et al. (2023) stated, conscientiousness urges learners to behave more politely and consistently, that is, to be more dependable and trustworthy while fulfilling a given task. Therefore, conscientiousness offers a solid basis for learning responsibility in the classroom by encouraging qualities and actions that promote efficient learning, academic achievement, and responsible engagement.

Agreeableness, referring to qualities like collaboration, honesty, friendliness, adaptability, cooperativeness, courtesy, and kindness (Bidjerano & Yun Dai, 2007; Clark, 2010; Hasanah et al., 2022; Lapitah et al., 2021; Major et al., 2006), also showed a positive association with learning responsibility in the present study. This may suggest a predisposition for agreeable

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individuals to engage responsibly in learning activities, however, the intensity of this link may vary. Clark and Schroth (2010) in their study found that agreeable individuals were more likely to have intrinsic motivation to pursue knowledge, complete the given tasks, and hold the opinion that attendance at school is essential. Similarly, a study conducted by Lounsbry et al. (2009) also revealed a positive link between self–directed learning and agreeableness. Thus, as a personality trait, agreeableness could have significant impacts on individuals' attitudes toward learning responsibility in that high levels of agreeableness frequently exhibit cooperative behaviour, empathy, and care for others. In addition, given that these people tend to reflect their devotion to personal and cooperative improvement, cherish peaceful relationships, and work hard to satisfy expectations due to their innate desires and motivation, they are more likely to demonstrate a high sense of responsibility in their academic endeavours. Additionally, supportive connections and collaborations for guidance with others and practices that prioritize group or pair works and promote learning responsibility could be other causes of the positive association.

The current study did not pose any positive or significant associations between extraversion and openness, and learning responsibility. Extraversion, connected to the reward systems in the brain (Blagrove & Pace–Schott, 2010), may generally be seen as an aspect of personality that encompasses further specialized qualities, such as superiority, adventure seeking, warmth, and enthusiasm (Saklofske et al., 2012). Matthews (2019) asserts that the trait is frequently not considered a consistent indicator of academic achievement, and extroverts could be better able to handle stress at school. This implies that although extraverted people might be better suited to handle stress in some educational settings, or have other advantages in learning environments, extraversion may not always be associated with a greater willingness to take responsibility for one's own learning. As for openness to experience, the trait refers to being innovative and creative, open to relatively rare ideas, challenging, and unconventional (Bauer & Liang, 2003; Salmon, 2012). Although in the current study, openness to experience as a trait did not correlate with learning responsibility, in some other studies, the trait displayed a positive association with similar fields. For instance, in Cazan and Schiopca's (2014) research, openness to experiences correlated with self–directed learning. Likewise, Bauer and Liang found a significant and positive relationship between openness to experiences with academic and intellectual tasks. In the current study, openness to experience as a trait did not correlate with learning responsibility, which may stem from the fact that learners who score highly on openness may be driven more by a need for novelty and excitement than by a particular dedication to owning and committing their learning path. Rather than making a diligent attempt to control and take responsibility for their own learning process, their involvement in educational settings could be more motivated by a passion for intellectual curiosity.

Conclusions

All in all, the present research on personality traits and their connection to learning responsibility has produced informative results that highlight the complex interactions between individuals' inclinations and their academic engagement. The study highlights the multifaceted nature of personality and seeks to provide a comprehensive understanding of how various personality traits shape individuals' tendencies to take on learning responsibilities. Although some traits, like emotional stability, conscientiousness, and agreeableness, displayed significant correlations with learning responsibility, other traits demonstrated insignificant or subtle correlations. The results highlight how crucial it is to take into account individual differences in personality when formulating interventions meant to support academic performance and learning. The study, however, draws attention to the existing gaps regarding the relationship between the variables that still exist, especially given the lack of previous research on the

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topic. Further studies should delve into more complex topics, such as the interactions between different personality traits and different learning environments, to improve our comprehension of learning responsibility. In addition, further research into the constant relationship between learning and personality traits has the potential to improve our comprehension of the variables in the learning process. Educators and policymakers may design strategies that enable individuals to develop effective paths in their educational activities, which eventually may pave the way for promoting lifelong learning and individual development.

References

Agustini, K., Wahyuni, D. S., Mertayasa, I. N. E., Wedhanti, N. K., & Sukrawarpala, W. (2021). Student–centered learning models and learning outcomes: Meta–analysis and effect sizes on the students' thesis. *Journal of Physics: Conference Series*, *1810*(1), Article 012049. https://doi.org/10.1088/1742–6596/1810/1/012049

Allan, G. M. (2006). *Responsibility for learning: Students' understandings and their self-reported learning attitudes and behaviours* [Master Thesis]. Queensland University of Technology, Queensland.

Angelini, G. (2023). Big five model personality traits and job burnout: a systematic literature review. *BMC Psychology, 11*(1). https://doi.org/10.1186/s40359–023–01056–y

Annuar, N., Sabri, S. M., Rahman, N. L. A., Musairah, S. K., Abd Mutalib, H., Daud, D., & Johan, M. R. M. (2023). The effect of personality traits towards self–directed learning skills among university students. *Proceedings of the 4th International Conference on the Future of Asian 2023 (ICoFA 2023)*, (pp. 348–359). https://doi.org/10.2991/978-2-38476-076-3

Atak, H. (2013). The Turkish adaptation of the Ten–Item Personality Inventory. *Archives of Neuropsychiatry, 50*, 312–319. https://doi.org/10.4274/npa.y6128

Ayish, N., & Deveci, T. (2019). Student perceptions of responsibility for their own learning and for supporting peers' learning in a project–based learning environment. *International Journal of Teaching and Learning in Higher Education, 31*(2), 224–237.

Barańczuk, U. (2019). The five factor model of personality and emotion regulation: A meta -analysis. *Personality and Individual Differences, 139*, 217–227. https://doi.org/10.1016/j.paid.2018.11.025

Barros, A., Simão, A. M. V., & Frisson, L. (2021). Self–regulation of learning and conscientiousness in Portuguese and Brazilian samples. *Current Psychology, 41*(11), 7835–7842. https://doi.org/10.1007/s12144–020–01232–y

Bauer, K. W., & Liang, Q. (2003). The effect of personality and precollege characteristics on first–year activities and academic performance. *Journal of College Student Development, 44*(3), 277–290. https://doi.org/10.1353/csd.2003.0023

Bidjerano, T., & Yun Dai, D. (2007). The relationship between the big–five model of personality and self–regulated learning strategies. *Learning and Individual Differences, 17*(1), 69–81. https://doi.org/10.1016/j.lindif.2007.02.001

Blagrove, M., & Pace–Schott, E. F. (2010). Trait and neurobiological correlates of individual differences in dream recall and dream content. *International Review of Neurobiology*, *92*, 155–180. https://doi.org/10.1016/S0074-7742(10)92008-4

Bodner, G. M. (1986). Constructivism: A theory of knowledge. *Journal of Chemical Education, 63*(10), 873–878. https://doi.org/10.1021/ed063p873

Cao, C., & Meng, Q. (2020). Exploring personality traits as predictors of English achievement and global competence among Chinese university students: English learning motivation as the moderator. *Learning and Individual Differences, 77*, Article 101814. https://doi.org/10.1016/j.lindif.2019.101814

Cazan, A. M., & Schiopca, B. A. (2014). Self–directed learning, personality traits and academic achievement. *Procedia – Social and Behavioral Sciences*, *127*, 640–644. https://doi.org/10.1016/j.sbspro.2014.03.327

Chaturvedi, M., & Chander, R. (2010). Development of emotional stability scale. *Industrial Psychiatry Journal, 19*(1) 37 – 40. https://doi.org/10.4103/0972–6748.77634

Clark, M., & Schroth, C. A. (2010). Examining relationships between academic motivation and personality among college students. *Learning and Individual Differences, 20*(1), 19–24. https://doi.org/10.1016/j.lindif.2009.10.002

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Conrad, N., & Patry, M. W. (2012) Conscientiousness and academic performance: A meditational analysis. *International Journal for the Scholarship of Teaching and Learning, 1*(6), 1–14. https://doi.org/10.20429/ijsotl.2012.060108

Costa, P. T., Jr., McCrae, R. R., & Dye, D. A. (1991). Facet scales for Agreeableness and Conscientiousness: A revision of the NEO Personality Inventory. *Personality and Individual Differences, 12*, 887–898.

De Feyter, T., Caers, R., Vigna, C., & Berings, D. (2012). Unravelling the impact of the Big Five personality traits on academic performance: The moderating and mediating effects of self–efficacy and academic motivation. *Learning and Individual Differences*, *22*(4), 439–448. https://doi.org/10.1016/j.lindif.2012.03.013

Dinata, D. S., Manuputty, J. A., Hurmanisa, Tinopi, Y. K., & Rudie. (2023). Engaging presence of constructivism philosophy in and through management of Christian Education: Reflective Investigation. *Journal of Scientific Research, Education, and Technology (JSRET)*, *2*(4), 1602–1616. https://doi.org/10.58526/jsret.v2i4.275

Diseth, Å. (2003). Personality and approaches to learning as predictors of academic achievement. *European Journal of Personality, 17*(2), 143–155. https://doi.org/10.1002/per.469

Dunbar, K., & Yadav, A. (2022). Shifting to student–centered learning: Influences of teaching a summer service learning program. *Teaching and Teacher Education, 110*, Article 103578. https://doi.org/10.1016/j.tate.2021.103578

Eilam, B., Zeidner, M., & Aharon, I. (2009). Student conscientiousness, self-regulated learning, and science achievement: An explorative field study. *Psychology in the Schools, 46*(5), 420–432. https://doi.org/10.1002/pits.20387

Erişti, B. (2017). Development of a learning responsibility scale. *Necatibey Faculty of Education Electronic Journal of Science and Mathematics Education, 11*(1), 481–503.

Etkin, J. (2018). Understanding self–regulation in education. *BU Journal of Graduate Studies in Education, 10*(1), 35–39.

Feist, G. J. (1998). A meta-analysis of personality in scientific and artistic creativity. *Personality and Social Psychology Review, 2*(4), 290–309.

Golder, J. (2018). Constructivism: A paradigm for teaching and learning. *International Journal of Research and Analytical Reviews (IJRAR), 5*(3), 678–686.

Gosling, S. D., Rentfrow, P. J., & Swann Jr, W. B. (2003). A very brief measure of the Big–Five personality domains. *Journal of Research in Personality*, *37*(6), 504–528.

Gökdağ Baltaoğlu, M. & Güven, M. (2020). Views of prospective teachers on learning responsibility. *International Journal of Contemporary Educational Research, 7*(1), 228–239. https://doi.org/10.33200/ijcer.669055

Hasanah, K., Kusmaningtyas, A., & Riyadi, S. (2022). The effect of extraversion, agreeableness, conscientiousness, emotional stability and openness to experience towards learning orientation, performance orientation and job performance. *World Journal of Advanced Research and Reviews, 16*(3), 905–923. https://doi.org/10.30574/wjarr.2022.16.3.1425

King, A. (1993). From sage on the stage to guide on the side. *College Teaching, 41*(1), 30–35. https://doi.org/10.1080/87567555.1993.9926781

Latipah, E., Kistoro, H. C. A., & Putranta, H. (2021). How are the parents' involvement, peers and agreeableness personality of lecturers related to self–regulated? *European Journal of Educational Research, 10*(1), 413–425. https://doi.org/10.12973/eu–jer.10.1.413

Lea, S. J., Stephenson, D., & Troy, J. (2003). Higher education students' attitudes to student–centred learning: Beyond "educational bulimia"? *Studies in Higher Education, 28*(3), 321–334. https://doi.org/10.1080/03075070309293

Leong, D. C. P. (2022). Emotional stability and motivation of 21st-century learners: A comparative review of learning theories. *Quantum Journal of Social Sciences and Humanities, 3*(6), 68–80. https://doi.org/10.55197/qjssh.v3i6.190

Lounsbury, J. W., Levy, J. J., Park, S. H., Gibson, L. W., & Smith, R. (2009). An investigation of the construct validity of the personality trait of self–directed learning. *Learning and Individual Differences, 19*(4), 411–418. https://doi.org/10.1016/j.lindif.2009.03.001

Major, D. A., Turner, J. E., & Fletcher, T. D. (2006). Linking proactive personality and the Big Five to motivation to learn and development activity. *Journal of Applied Psychology, 91*(4), 927–935. https://doi.org/10.1037/0021–9010.91.4.927

Matthews, G., Zeidner, M., & Roberts, R. D. (2006). Models of Personality and Affect for Education: A Review and Synthesis. In P. A. Alexander & P. H. Winne (Eds.), *Handbook of educational psychology* (pp. 163–186). Lawrence Erlbaum Associates Publishers.

Matthews, G. (2019, April, 12). *Extraversion–introversion.* https://www.sciencedirect.com/science/article/abs/pii/B9780128093245217653

Nilson, L.B. (2013). *Creating self–regulated learners: Strategies to strengthen students' self-awareness and learning skills* (1st Ed.). Routledge. https://doi.org/10.4324/9781003443803

Ning, H. K., & Downing, K. (2012). Influence of student learning experience on academic performance: The mediator and moderator effects of self-regulation and motivation. *British Educational Research Journal*, *38*(2), 219–237. https://doi.org/10.1080/01411926.2010.538468

Noftle, E. E., & Robins, R. W. (2007). Personality predictors of academic outcomes: Big five correlates of GPA and SAT scores. *Journal of Personality and Social Psychology, 93*(1), 116–130. https://doi.org/10.1037/0022–3514.93.1.116

Oates, S. (2019). The importance of autonomous, self–regulated learning in primary initial teacher training. *Frontiers in Education, 4*, 102. https://doi.org/10.3389/feduc.2019.00102

O'Neill, G., & McMahon, T. (2005). Student–centred learning: What does it mean for students and lecturers? In G. O'Neill, S. Moore, & B. McMullin (Eds.), *Emerging issues in the practice of University Learning and Teaching* (pp. 27–36). University College Dublin.

Pintrich, P. R. (2000). The role of goal orientation in self–regulated learning. In M. Boekaerts, P. R. Pintrich and M. Zeidner. (Eds.), *Handbook of Self–Regulation*, pp.451–502. Academic.

Rivers, D. J. (2021). The role of personality traits and online academic self–efficacy in acceptance, actual use and achievement in Moodle. *Education and Information Technologies, 26*(4), 4353–4378. https://doi.org/10.1007/s10639–021–10478–3

Roberts, B. W., Lejuez, C., Krueger, R. F., Richards, J. M., & Hill, P. L. (2014). What is conscientiousness, and how can it be assessed? *Developmental Psychology, 50*(5), 1315–1330. https://doi.org/10.1037/a0031109

Rosales–Pérez, A. M., Fernández–Gámez, M. A., Torroba–Díaz, M., & Molina–Gómez, J. (2021). A Study of the emotional intelligence and personality traits of university finance students. *Education Sciences, 11*(1), 25. https://doi.org/10.3390/educsci11010025

Salmon, C. (2012). Birth order, effect on personality, and behavior. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (2nd ed., pp. 353–359). Academic Press.

Saklofske, D. H., Eysenck, H. J., Eysenck, S. B. G., Stelmack, R. M., & Revelle, W. (2012). Extraversion–introversion. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (2nd ed., pp. 150–159). London, England: Academic Press.

Schraw, G., Kauffman, D. F., & Lehman, S. (2006). *Self–regulated Learning*. Encyclopedia of Cognitive Science. https://doi.org/10.1002/0470018860.s00671

Smiderle, R., Rigo, S. J., Marques, L. B., Peçanha de Miranda Coelho, J. A., & Jaques, P. A. (2020). The impact of gamification on students' learning, engagement and behavior based on their personality traits. *Smart Learning Environments, 7*(1).

Smith, J., Guimond, F. A., Aucoin, P., Gagnon, M., Moreau, D., St–Amand, J., Ayotte–Beaudet, J. P., &, Talbot, E. (2021). Examining high school students' personality traits of extraversion and emotional stability in relation to their academic expectation and value appraisals. *Interdisciplinary Education and Psychology, 2*(3), 1–15. https://doi.org/10.31532/InterdiscipEducPsychol.2.3.006

Swanberg, A. B., & Martinsen, Y. L. (2009). Personality, approaches to learning and achievement. *Educational Psychology, 30*(1), 75–88.

Taylor, J. (2013). What is student–centredness and is it enough? *The International Journal of the First Year in Higher Education, 4*(2), 39–48.

von Glasersfeld E. (1995). A constructivist approach to teaching. In: Steffe L. P. & Gale J. (eds.) *Constructivism in education*. 3–15. Erlbaum.

Zimmerman, B. J. (2002). Becoming a self–regulated learner: An overview. *Theory into Practice, 41*(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2

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