Original Research Article

Role of Personality Traits and Wellbeing Attributes in Predicting the Academic Achievement of Post-Graduate Agri-Business Management Students

ABSTRACT

A study was conducted to assess the personality traits and well-being attributes, and to find out their role in predicting academic achievement of students pursuing post-graduate diploma in agri-business management. Data was collected from 166 students by administering the Big-Five Personality Inventory, Oxford Happiness Questionnaire, Satisfaction with Life Scale and Psychological Well-Being (PWB) questionnaires. The findings revealed that among the personality traits, neuroticism and openness were found higher in females compared to male students. However, such gender differences were not found with regard to happiness, life satisfaction and PWB. Except for neuroticism, personality traits were positively correlated with happiness, life satisfaction, and PWB. Academic achievement was positively associated with conscientiousness and negatively associated with neuroticism traits. The regression model on academic achievement predicts 11.4 % of variation by considering personality (neuroticism and conscientiousness, being the strongest contributors) and well-being attributes.

Keywords: Personality Traits, Wellbeing Attributes, Academic Achievement, Agri-Business Management Students

1. INTRODUCTION

"Attending a new college or university can be very stressful for majority of students especially when they have to go through the process of adapting and adjusting to new educational and social environments; mixing with new and different friends from diverse backgrounds and experiences; coupled with different cultural values and norms, high self-expectations and new mode of conversation and language, apart from academic demands" [1,2]. "This experience of difficult changes and challenges affects their psychological wellbeing and concurrently their success in academics, and if not well managed, this can lead to psychological distress viz., stress, anxiety and depression among students" [3]. "A mentally fit student can initiate proper social relationships, enthusiastic to learn with ambition to implement his/her plans in the future. Students are at a crucial stage of development as they are more subjected to experience mental illnesses" [4].

2. REVIEW OF LITERATURE

"Personality can be viewed as a dynamic and organized set of characteristics possessed by an individual that uniquely influence his or her cognitions, emotions, interpersonal and social orientation, motivations and behaviors in various aspects of situations. Field of personality addresses three issues – human universal, individual differences and individual uniqueness. The Big Five personality dimensions were derived from the analysis of natural-language terms used by people to describe themselves" [5]. "Over the past several years, the concept of the Big Five personality traits has been widely adopted among researchers, both in terms of concept development and in its application to the fields of psychology and behavioral science" [6]. The Big Five personality traits consist of five dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness [7].

"The Big Five traits have been related to a wide range of behaviors [8], including academic achievement and job performance" [7,9]. "The relative convergence by researchers on the value of a Big Five organizing framework for personality makes it a promising starting point for examining the intricate relationship between personality, motivation, and achievement" [7]. "Among the personality traits, conscientiousness, openness and agreeableness are positively

related to academic performance [10], and neuroticism is associated with impaired academic performance" [11].

"Two different perspectives have been proposed regarding well-being studies and their role in the psychological domains of cognition, emotion, and motivation" [12]. "The subjective well-being perspective (SWB) specializes in the hedonic aspect of well-being, that is the pursuit of happiness and a good life. The model of subjective well-being has been conceptualized into two parts: the emotional or affective part and the judgmental or cognitive part" [13]. "The judgmental part has also been conceptualized as life satisfaction. Even though the affective aspect of subjective well-being has been researched extensively, the judgmental aspect was not studied extensively. The Satisfaction with Life Scale (SWLS) [14] is a reputed tool to measure the judgmental component of subjective well-being (SWB)". "The SWLS is shown to be a valid and dependable measure of life satisfaction, applicable to a wide range of age groups and situations. Life satisfaction as measured by SWLS shows a high degree of temporal stability and it is suggested as a complement to scales that focus on psychopathology or subjective well-being as it assesses an individuals' conscious evaluative judgment of his or her satisfaction" [15].

"The psychological well-being (PWB) concept specializes in eudaimonic well-being [16], which emphasizes greater human ability and have a meaningful life". "Ryff [17] advanced a version of psychological (eudaimonic) well-being that consists of six related yet distinctive attributes. This model of eudaimonic well-being rests on the assumption that individuals make every effort to realize their potential through their inherent talents". The six dimensions of psychological well-being attributes comprise "*self-acceptance, environmental mastery, purpose in life, positive relations with others, personal growth and autonomy*" [18]. The psychological well-being attributes have been reported to have a strong relationship with personality traits, intellectual and physical health, healthy aging, family, and occupational experiences [19].

"Academic success is the general academic skills which involve a combination of effort expended by student in terms of study skill, self-organizational strategies and abilities to perform well academically. Besides, scholars have established that differences in student's psychological well-being and their success in academics could be attributed to individual differences" [20,21,22]. "Specifically, several researchers found that personality characteristics significantly influence psychological well-being" [23].

"Moreover, In Deci and Ryan's [24] self- determination theory posited that, personality traits and human motivations encompass both inborn psychological needs and intrinsic growth tendencies, and these are responsible for human self-determined growth and success in life" [25]. "From the components of academic success as explained in self-determination theory, students have inherent motivation to absorb, explore autonomously and without hindrances, and also master their surroundings as they relates with people and various individuals, by holding high self-esteem and psychological competence about their fundamental psychological nutrients or needs of life, students ensure that they are dogged to perform excellently in their academics as they pursue their academic career. Similarly, as personality traits play key roles in ensuring persistent strong-will in students, contents of present psychological well-being in individual increase student quest to succeed and achieve in their life. Hence, the key elements of students' academic success include their need for psychological competence, relatedness and autonomy in carrying out their day-to-day academic activities serves as the important route connecting the psychological well-being and academic success" [26,27].

Even though a few studies were conducted to investigate the relationship between personality characteristics and well-being of college/university going students, to our knowledge such studies were lacking on the students pursuing Post-Graduation in Agri-Business Management education. Moreover, studies linking student's personality, well-being attributes with their academic achievement are meagre. The hypothesis of the present study is to prove or disprove the relationship between the personality/well-being attributes with the academic achievement of the students. Hence the present investigation was conducted with the following **objectives:**

1. To assess the personality traits and well-being attributes among the students.
2. To find out the relationship between personality traits and well-being attributes
3. To predict students' academic achievement from personality and well-being attributes.

3. RESEARCH METHODOLOGY

3.1 Sample

The present study was conducted on the students who got admitted in the Post Graduate Diploma in Agri-Business Management (PGD-ABM) course during 2020 to 2022 at the Indian Council of Agricultural Research (ICAR) based National Academy of Agricultural Research Management

(NAARM), Hyderabad, Telangana state, India. The sample consists of a total of 166 students, out of which, 88 are male (53 %) and 78 are female students (47 %). The age of the students varied from 22 to 26 years with an average of 22.8 years. The educational qualification of majority of students is either B. Sc. in Agriculture/Horticulture or B. Tech. in Agricultural Engineering or allied subjects in Agricultural Sciences.

3.2 Measurement Tools

Big-Five Inventory-10 (BFI-10)

The BFI is a scale that measures a person on the major five domains of personality viz., extraversion, agreeableness, conscientiousness, neuroticism, and openness [5]. The BFI-10 comprised of 10 items taken from the BFI-44, two items for each personality traits. Each item is estimated with the same Likert scale as for the BFI-44, giving a number of 2–10 for every domain total score [28]. It is a short-scale version of the well-established BFI and was developed to produce a questionnaire for research settings with extreme time constraints. Previous analysis has clearly shown that the BFI-10 possesses psychological properties that are comparable in size and structure to those of the larger version of BFI. Cronbach coefficient values varied from 0.45 to 0.62 [29,30].

Oxford Happiness Questionnaire (OHQ)

The OHQ is often used to estimate happiness attributes comprising twenty-nine items [31]. Participants are asked to reply to every one of them on a six-point Likert-type scale (ranging from 1 = strongly disagree to 6 = strongly agree), with higher scores indicating higher happiness. The OHQ has been shown to possess adequate test-retest dependableness (7-week duration = 0.78; 5-months duration = 0.67) and moderate to high internal consistency with a typical Cronbach between 0.64 and 0.87 [32].

Satisfaction with Life Scale (SWLS)

The SWLS is a five-item tool for estimating existing global life satisfaction, that comprises a cognitive judgment of an individual's quality of life [14]. Participants responded on a Likert scale from 1 - highly disagree, to 7 - highly agree. An example item is, "I am satisfied with my current life." Cronbach's values ranged from 0.89 to 0.91 across global regions [15,33].

Psychological Well-Being (PWB-18)

The Scales of PWB consisting of six attributes of positive psychological functioning: "self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth" [17]. In this study, a shortened version of Ryff's PWB scale of 18-items with 3 items per subscale was used [18]. Participants were asked to respond to a seven-point Likert scale giving a score of 1 for strongly agree to 7 for strongly disagree.

3.3 Procedure

A Google Form questionnaire was administered to the students during the first trimester of their course. The students were explained the purpose and objectives of the study, the confidentiality of the data and instructions to be followed by the participants while responding to the items in the survey. The data collected including the socio-demographic details of the participants, followed by the statements in each of the test tools used in the survey. The survey questionnaire was administered to the participants online. Tests were scored and tabulated, and the descriptive statistics were calculated. Cronbach's reliability coefficients were used to measure the internal consistency of the test items [34]. The student's t-test was employed for gender-wise comparisons. Pearson correlation analysis and regression analysis were carried out to check and quantify the association between different study variables. All the analysis was carried out using R statistical programming language [35].

4. RESULTS

The gender-wise mean scores of students on Big-Five personality traits, well-being attributes and academic achievement along with their standard deviation, t-values and Cronbach alpha coefficients are presented in **Table 1**. Among the personality traits, gender differences were significant with reference to neuroticism and openness. Female students recorded higher scores in neuroticism ($t = 2.131$; $p < 0.034$) and openness ($t = 2.659$; $p < 0.008$) compared to male students. However, such gender differences were not observed in extraversion, agreeableness and conscientiousness. The Cronbach alpha coefficients obtained varied from 0.21 for agreeableness to 0.46 for extraversion.

Table 1. Mean scores on personality traits, well-being attributes and academic achievement of students

Variable	Score Range	Males (n=88)	Females (n=78)	T-value	P-value	α - coefficient
Personality Traits						
Extraversion	2 - 10	6.55 ± 1.68	6.79 ± 1.83	0.914	0.361	0.46
Agreeableness	2 - 10	7.99 ± 1.39	8.28 ± 1.34	1.379	0.169	0.21
Conscientiousness	2 - 10	6.68 ± 1.64	6.94 ± 1.7	0.980	0.328	0.40
Neuroticism	2 - 10	5.63 ± 2.05	6.24 ± 1.64	2.131	0.034	0.36
Openness	2 - 10	7.52 ± 1.5	8.18 ± 1.68	2.659	0.008	0.35
Oxford Happiness Index	1 - 6	4.42 ± 0.71	4.5 ± 0.69	0.765	0.445	0.89
Satisfaction with Life score	5 - 35	22.58 ± 5.21	23.96 ± 5.32	1.689	.092	0.75
Psychological Well-Being (PWB)						
Autonomy	3 - 21	14.77 ± 3.1	14.12 ± 2.9	-1.404	0.162	0.44
Environmental Mastery	3 - 21	15.18 ± 2.99	15.13 ± 3.36	-0.108	0.913	0.48
Personal Growth	3 - 21	18.26 ± 2.76	18.42 ± 2.84	0.371	0.710	0.57
Positive Relations	3 - 21	14.68 ± 4.4	15.72 ± 3.79	1.614	0.108	0.59
Purpose in Life	3 - 21	14.36 ± 3.15	14.95 ± 3.61	1.115	0.266	0.20
Self-Acceptance	3 – 21	16.4 ± 3.06	16.5 ± 3.48	0.201	0.840	0.50
PWB-Total	**18 - 126**	**93.7 ± 10.6**	**94.8 ± 13.0**	**0.632**	**0.528**	**0.64**
Academic Achievement (OGPA)	7.0 – 10.0	7.85 ± 0.26	8.01 ± 0.22	3.361	0.001	

We have calculated the number of students who scored more than the average in each trait of Big-Five personality and the per cent population is depicted in **Fig 1a.** Among the students 51.8, 69.8, 55.4, 35.5 and 57.2 % were found to obtain higher scores in extraversion, agreeableness, conscientiousness, neuroticism and openness to experiences, respectively.

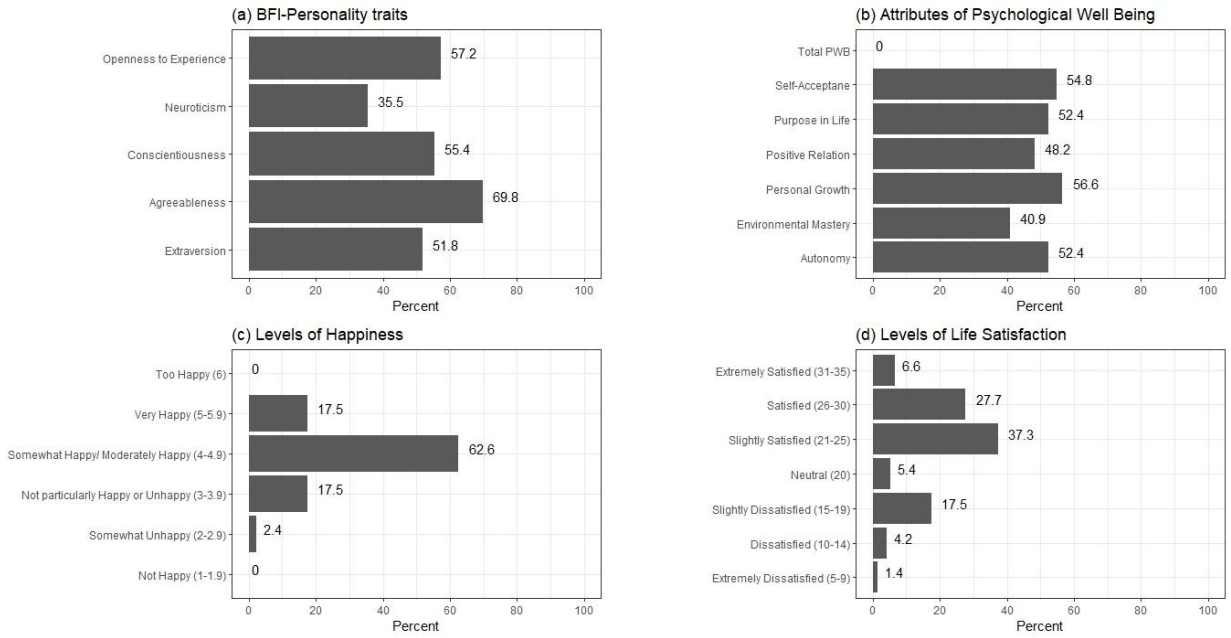

Figure 1: (a) Students with above average scores in BFI-personality traits (b) Attributes of psychological well-being (c) Distribution of levels of happiness and (d) Life satisfaction

The scores on Oxford Happiness Questionnaire (OHQ) did not differ between male (4.42 ± 0.71) and female students (4.50 ± 0.69). The internal consistency of OHQ, as measure through the Cronbach alpha coefficient, was 0.89 (Table 1). In the study, a majority of participants (62.6 %) were found to be 'somewhat happy/moderately happy (OHQ scores ranging from 4.0 to 4.9) and 17. 5 % were found to be 'very happy' (OHQ scores ranging from 5.0 to 5.9) while, 19.9 % were found to be "unhappy" with a score less than 3.9 (**Fig 1c**).

The scores on the Satisfaction with Life Scale (SWLS) were not different between male (22.58 ± 5.21) and female (23.96 ± 5.32) students, while the Cronbach alpha coefficient value of 0.75 was obtained for the scale. In SWLS, 37.3 % were reported to be 'slightly satisfied' (scores ranging from 21 to 25) and 27.2 % were reported to be 'satisfied' (scores ranging from 26 to 30) while, 23.1 % were found to be 'dissatisfied' (scores less than 20). Only about 6.6 % of students were reported to be 'extremely satisfied' (**Fig 1 d**).

Gender differences were not observed in all the six attributes and total score on Psychological Well-Being (PWB). The Cronbach alpha coefficients varied from 0.20 for 'purpose in life' to 0. 59 for 'positive relations'. We have calculated the number of students who scored more than the average in each attribute of PWB and the per cent population is depicted in **Fig 1b**. Among the

students, 52.4, 40.9, 56.6, 48.2, 52.4 and 54.8 % were found to obtain higher scores in autonomy, environmental mastery, personal growth, positive relations, purpose in life and self-acceptance, respectively. The academic achievement of students in terms of overall grade point average (OGPA) showed that female students recorded higher OGPA (8.01 ± 0.22) compared to male students (7.85 ± 0.26).

The inter-correlations between personality traits and well-being variables measured through three instruments in the study are presented in **Table 2.** Extraversion, agreeableness, conscientiousness and openness make positive correlations (r = 0.42, 0.25, 0.39 and 0.21, respectively) and neuroticism makes a negative correlation (r = -0.27) with happiness. Similarly, extraversion, agreeableness, conscientiousness and openness make positive correlations (r = 0.22, 0.21, 0.22 and 0.20, respectively) and neuroticism makes a negative correlation (r = -0.26) with life satisfaction. Unlike neuroticism, personality traits were positively correlated with all the attributes of PWB, except with purpose in life. Conscientiousness is the only personality traits which is positively correlated with purpose in life (r = 0.18). Neuroticism is negatively associated with all the attributes of PWB. Academic achievement in terms of student's OGPA is positively correlated with personality traits like conscientiousness (r = 0.20) and negatively correlated with neuroticism (r = 0.19).

Table 2. Correlations between Big-Five personality traits and well-being attributes/academic achievement of students

Instrument	Variable	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness
OHQ	Happiness	0.42**	0.25**	0.39**	-0.27**	0.21*
SWLS	Life satisfaction	0.22**	0.21*	0.22**	-0.26**	0.2*
PSW	Autonomy	0.23**	-0.03	0.13	-0.29**	0.16*
	Environmental Mastery	0.30**	0.16*	0.39**	-0.3**	0.19*
	Personal Growth	0.11	0.06	0.23**	-0.04*	0.19*
	Positive Relations	0.35**	0.30**	0.20*	-0.23**	0.14
	Purpose in Life	0.12	0.06	0.18*	-0.06	0.02

	Self-Acceptance	0.29**	0.22*	0.30**	-0.33**	0.34*
	PSW Total	**0.40****	**0.23****	**0.40****	**-0.35****	**0.29****
Academic Achievement	OGPA	0.03	0.07	0.20*	-0.19*	0.04

The results of regression analysis for academic achievement as a function of personality traits, well-being attributes along with gender and age, are presented in **Table 3**. Gender of the students significantly contributed towards predicting the academic achievement of students. Among the personality traits, neuroticism has the highest (but negative) contributor to the academic achievement followed by conscientiousness, which is positively associated with the academic achievement. This model is successful in capturing 11.4 % of the variation in the academic achievement of the students.

Table 3. Regression analysis of the association between personality traits and well-being attributes with academic achievement of students

Variable	Regression Coefficient	Std. Error	t-value	p-value	Remarks
Intercept	0.354	0.14	2.58	0.01	*
Gender (Male)	-0.659	0.19	-3.47	<0.01	**
Age	-0.061	0.09	-0.67	0.50	
Extraversion	-0.064	0.11	-0.58	0.56	
Agreeableness	0.003	0.10	0.03	0.98	
Conscientiousness	0.191	0.12	1.61	0.11	
Neuroticism	-0.248	0.10	-2.44	0.02	*
Openness	0.003	0.10	0.04	0.97	
Happiness score	-0.108	0.19	-0.58	0.56	
Satisfaction score	0.169	0.12	1.39	0.17	
Psychological Well Being Score	-0.137	0.14	-1.01	0.32	
F Value - 2.393 (p - 0.013) Adjusted R^2 - 0.114					

5. DISCUSSION

In the present study, females recorded higher neuroticism and openness compared to male students. Females on average, are more prone to anxiety and other negative emotions compared to males resulting in higher scores in neuroticism, especially during late adulthood [36,37,38]. Contrary to the present results, most studies reported that females were somewhat less open, on average, than were males [36,39]. However, Soto et al [38] reported that males were found less open to aesthetics, on average, than were females. Men reported themselves to be higher in assertiveness and openness to ideas whereas women were higher in neuroticism, agreeableness, warmth, and openness to feelings [40].

Gender differences are not found in the happiness, life satisfaction, and PWB attributes of students. Further, the majority of participants reported higher levels of happiness, life satisfaction, and PWB attributes. Earlier studies have shown that the males were slightly happier than females, however, the magnitude of this distinction was very less [41]. In an analysis of two international studies, Lucas & Gohm [42] found that females felt more negative emotions in their life span compared to males in most of the countries studied.

Correlation studies indicated that except for neuroticism, personality traits were positively correlated with happiness, life satisfaction, and PWB of students. These results are typically in line with the existing literature. As an example, extraversion, neuroticism, and conscientiousness are associated with different aspects of well-being [43,44,45]. Results of the present study indicated that the academic achievement was positively associated with conscientiousness and negatively associated with neuroticism traits. “Earlier studies also indicated that among the personality traits, conscientiousness, openness and agreeableness are positively related to academic performance [10], and neuroticism is associated with impaired academic performance” [11].

“The regression model indicated the partial role of personality traits especially conscientiousness and neuroticism and well-being attributes in predicting the academic achievement of students in the present study. The importance of student wellbeing for academic outcomes, and the relationships between wellbeing and engagement, remain open research questions for higher education. Wellbeing is a loosely defined concept that may include a number of different dimensions, including satisfaction, positive affect (e.g. enjoyment, gratitude, contentment) and

negative affect (e.g. anger, sadness, worry)" [24]. "Many studies have explored the relationship between wellbeing and academic performance, commonly finding a positive association, e.g. in US college undergraduates" [46]. "The relationship between engagement and wellbeing is less well studied in higher education, but a positive association has been found in other working environments. A recent government report on student mental health and wellbeing in UK universities found increasing incidence of mental illness, mental distress and low wellbeing" [47]. The same study [47] found that "these negative wellbeing factors had a substantial harmful impact on student performance and course completion; by extension, students with positive wellbeing are likely to perform better and complete their studies".

6. CONCLUSION

From the study, it is revealed that among the personality traits conscientiousness and neuroticism were significantly correlated with the academic achievement of the students. Except neuroticism, all the personality traits are positively related with the student's well-being attributes. Finally, it is inferred from the study that both personality and well-being attributes along with the gender play an important role predicting the academic achievement of the agri-business management students to the extent of 11.4 %.

7. LIMITATIONS AND FUTURE SCOPE

Considering the exploratory nature of this study, to our information, this may be the primary investigation to assess personality and well-being attributes of agribusiness post-graduate students and to find the relationship of these variables with their academic performance. Thus the outcome cannot be generalized because of sample size and limitation of variables examined as potential predictor of their academic achievement. Future research could extend these findings by including other individual variables such as learning or thinking styles, self-efficacy, or need for cognition in explaining student academic achievement.

CONSENT

As per international standard or university standard, Students written consent has been collected and preserved by the author(s).

REFERENCES

1. Chen J, Wu Y, Yi H, Li Z, Eshita Y, Qin P, Chen L, Sun J. The impact of academic stress on medical students attending college in the Inner Mongolia Area of China. *Open Journal of Preventive Medicine*. 2013; *3*(2):149-154.
2. Kumaraswamy N. Academic stress, anxiety and depression among college students- A brief review. *International Review of Social Sciences and Humanities*. 2013; 5 (1):135-43.
3. Compass, B. E. Processes of Risk and Resilience During Adolescence: Linking Contacts and Individuals in R. Lerner & L. Steinberg (Eds), *Handbook of Adolescent Psychology*. 2004: New York: Wiley.
4. Giugliano RJ. The systemic neglect of New York's young adults with mental illness. *Psychiatrist Service*. 2004; 55(4): 451-453.
5. John OP, Srivastava S. The Big-Five Trait Taxonomy: History, Measurement, and Theoretical Perspectives", in L. A. Pervin & O. P. John (Eds.), *Handbook of Personality: Theory and Research*, 1999; Vol. 2, pp. 102-138, Guilford Press, New York.
6. Goldberg LR. An alternative 'description of personality': The Big-Five factor structure", *Journal of Personality and Social Psychology*. 1990; 59 (6): 1216-1229.
7. Costa P T, McCrae RR. NEO PI-R: Professional manual: Revised NEO PI-R and NEO-FFI. Florida: 1992; Psychological Assessment Resources, Inc.
8. Ozer DJ, Benet-Martinez V. Personality and the prediction of consequential outcomes. *Annual Review of Psychology*. 2005; 57: 401−421.
9. Judge TA, Jackson CL, Shaw JC, Scott BA, Rich BL. Self-efficacy and work-related performance: The integral role of individual differences. *Journal of Applied Psychology*. 2007; 92: 107−127.
10. Farsides T, Woodfield R. Individual differences and undergraduate academic success: The roles of personality, intelligence, and application. *Personality and Individual Differences*. 2003; 33:1225−1243.
11. Chamorro-Premuzic T, Furnham A. Personality predicts academic performance: Evidence from two longitudinal samples. *Journal of Research in Personality*. 2003; 37: 319−338.
12. Disabato DJ, Goodman FR, Kashdan TB, Short JL, Jarden A. Different types of well-being? A cross-cultural examination of hedonic and eudaimonic well-being. *Psychological Assessment*. 2016; 28 (5): 471-482.
13. Diener E. Subjective Well-Being: The Science of Happiness and a Proposal for a National Index. *American Psychologist.*2000; 55 (1): 34-43.
14. Diener E, Emmons RA, Larsen RJ, Griffin S. The Satisfaction with Life Scale. *Journal of Personality Assessment*. 1985; 49: 71-75.
15. Pavot WG, Diener E. Review of the Satisfaction with Life Scale. *Psychological Assessment*. 1993; 5:164-172.

16. Waterman AS. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology*. 1993; 64: 678–691.
17. Ryff CD. Happiness is everything, or is it? Explorations on the meaning psychological well-being. *Journal of Personality and Social Psychology.* 1989; *57*:1069–1081.
18. Ryff CD, Keyes CL. The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*. 1995; *69*: 719–727.
19. Ryff CD. (2014). Psychological well-being revisited: *Advances in the science and practice of Eudaimonia. Psychotherapy and Psychosomatics*. 2014; 83:10–28.
20. Poropat AE, Corr PJ. Thinking bigger: The Cronbachian paradigm & personality theory integration. *Journal of Research in Personality.* 2015; *56*(1): 59-69.
21. Eyon EI, David BE, Umoh AJ. The Influence of Personality Trait on the Academic Performance of Secondary School Students in Cross River State, Nigeria. IOSR *Journal of Humanities and Social Science.* 2014; 19 (3):12-19.
22. Meera K, Steven JK, Ronald RS, Alen A. The Big Five personality traits, learning styles, and academic achievement. *Personality and Individual Differences* 2011; *51*: 472– 477.
23. Costa PT, McCrae RR. Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*. 1980; *38*: 668-678.
24. Deci EL, Ryan RM. Hedonia, eudaimonia, and well-being: An introduction. *Journal of Happiness Studies*. 2008; 9 (1):1–11.
25. Ryan RM, Huta V, Deci EL. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies.*2008; *9*:139–170.
26. Ullah F. Personality Factors as Determinants of Psychological Well-Being among University Students. *The International Journal of Indian Psychology.* 2017; 4 (2), 5-16.
27. Osamika BE, Lawal T, Osamika AE, Hounhanou AJV, Laleye M. Personality characteristics, psychological wellbeing and academic success among university students. *International Journal of Research in Education and Science*. 2021; 7(3): 805-821.
28. Rammstedt B, John OP. Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*. 2007; 41: 203-212.
29. Balgiu BA. The psychometric properties of the Big Five inventory-10 (BFI-10) including correlations with subjective and psychological well-being. *Global Journal of Psychology Research: New Trends and Issues.* 2018; 8 (2): 61–69.
30. Gosling SD, Rentfrow PJ, Swann WB. A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*. 2003; 37: 504–528.
31. Hills P, Argyle M. The Oxford Happiness Questionnaire: A Compact Scale for the Measurement of Psychological Well-Being. *Personality and Individual Differences.*2002; 33 (7):1073-1082.

32. Argyle M, Martin M, Crossland J. Happiness as a Function of Personality and Social Encounters, in J. P. Forgas & J. M. Innes (Eds.), *Recent Advances in Social Psychology*: An International Perspective, 1989; Elsevier, North-Holland.
33. Di Fabio A, Gori A. (2020). Satisfaction with life scale among Italian workers: reliability, factor structure and validity through a big sample study. *Sustainability*. 2020; 12(14): 5860.
34. Cronbach LJ. Coefficient Alfa and the internal structure of tests. *Psychometrika*. 1951; 14: 297-443.
35. R Core Team. R: A language and environment for statistical computing. R Foundation for Statistical Computing, 2021; Vienna, Austria, Retrieved from http://www.R-project.org/.
36. Akyunus M, Gencoz T, Aka T. Age and sex differences in basic personality traits and interpersonal problems across young adulthood, *Current Psychology*. 2021; 40: 2518-2527.
37. Donnellan MB, Lucas RE. (2008). Age differences in the Big Five across the life span: Evidence from two national samples. *Psychology and Ageing*. 2008; 23: 558–566.
38. Soto CJ, John OP, Gosling SD, Potter J. Age differences in personality traits from 10 to 65: Big-five domains and facets in a large cross-sectional sample. *Journal of Personality and Social Psychology*. 2011; 100 (2): 330-348.
39. Chiorri C, Marsh HW, Ubbiali A, Donati D. Testing the factor structure and measurement invariance across gender of the Big Five Inventory through exploratory structural equation modelling. *Journal of Personality Assessment*. 2016; 98: 88-99.
40. Costa PT, Terracciano A, McCrae RR. Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*. 2001; 81(2): 322–331.
41. Haring MJ, Stock WA, Okun MA. A research synthesis of gender and social class as correlates of subjective wellbeing. *Human Relations.*1984; 37: 645-657.
42. Lucas RE, Gohm CL. Age and sex differences in subjective well-being across cultures. In E. Diener & E. M. Suh (Eds.), *Subjective well-being across cultures*. 2000; Cambridge, MA: MIT Press.
43. DeNeve KM, Cooper H. The Happy Personality: A Meta-Analysis of 137 Personality Traits and Subjective Well-Being. *Psychological Bulletin.*1998; 124 (2): 197-229.
44. Schmutte PS, Ryff CD. (1997). Personality and well-being: Re-examining methods and meanings. *Journal of Personality and Social Psychology*. 1997; 73: 549–559.
45. Sirgy MJ. Effects of Personality on Wellbeing. In: *The Psychology of Quality of Life*. Social Indicators Research Series. 2021; 83: 6-9, Springer.
46. Plominski AP, Burns LR. An Investigation of Student Psychological Wellbeing: Honors Versus Non honors Undergraduate Education. *Journal of Advanced Academics.*2018; 29 (1): 5–28.

47. Thorley C. Not by Degrees: Improving student mental health in the UK's universities. IPPR; 2017.