

# **Undergraduate Students' Personality Traits: Relationship with Students' Gender and Parental Socioeconomic Factors**

Gkatsa Tatiani

Department of Primary School, University of Ioannina, Ioannina, Greece

#### **ARTICLE INFO**

Keywords:

Personality traits/BFF, emerging adulthood, undergraduate students, gender, socioeconomic factors of parents

#### **ABSTRACT**

The study investigates in 301 university students, the relationship of Big Five Factors Model/BFFM personality traits with gender and parental socioeconomic factors. Students completed the International Personality Item Pool/IPIP-50 item, an online self-report questionnaire, and answered questions about specific socioeconomic factors, the educational level and the profession of the parents separately. Statistical Package for Social Sciences/SPSS, 26.0 was used for statistical analysis. Findings confirm gender differences on the Emotional Stability/Neuroticism and Agreeableness scales. Also, both the low educational level and occupation of the parents were associated with higher Agreeableness and the father's low educational level with higher Conscientiousness.

#### 1. Introduction

The personality traits Big Five Model (BFM) has been the focus of many studies over several decades (Costa, 2001) and has been linked to gender and socioeconomic indicators at each age (Costa, 2001).

Personality in emerging adulthood (Arnett, 2006), as in a group of undergraduate students has not been finalized. However, dimensional personality traits tend to take a more stable and permanent form as the effects of childhood and adolescence are already reflected in them (Costa & McCrae, 1994). The question arises as to whether in the transition from adolescence to adulthood personality may be identified effects of gender and parental socioeconomic factors.

In the international literature, the relationship between gender, personality and factors that contribute to students' academic performance are discussed (Hakelind et al., 2022). Few studies focus on linking personality traits with gender similarities and differences in this age group (Sander & de la Fuente, 2020; Rubinstein, 2005). Also, in the period of emerging adulthood, the partial autonomy of undergraduate students (García Mendoza et al., 2019; Goger et al., 2020) and their non-independence from parents highlights the possible influence of socioeconomic factors of parents on personality.

Cite this article as:

Gkatsa, T. (2023). Undergraduate Students' Personality Traits: Relationship with Students' Gender and Parental Socioeconomic Factors. European Journal of Behavioral Sciences, 6(2): 10-22. https://doi.org/10.33422/ejbs.v6i2.1018

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<sup>\*</sup>Corresponding author E-mail address: tgkatsa@uoi.gr

#### 2. Review of the Literature

#### 2.1. The Big Five Factors Model (BFFM)

The Big Five Factors Model (BFFM) is a strong and widely accepted model of personality organization. It is organized into five factors / dimensional structures, which contain individual features / aspects (Costa and McCrae, 1992). They are the fixed, permanent, patterns of behavior, thinking and emotions that constitute and co-form the fundamental elements in the dimensional structures of the personality. The extroversion factor / dimension describes sociability, enthusiasm, energy, optimism as opposed to introversion and loneliness (Costa & McCrae, 1992). The agreement attributes kindness, compassion, empathy, as opposed to hostility, cynicism and competitiveness. The conscientiousness indicates organized behavior for goal fulfillment, control, organization, discipline, responsibility, goal focus, and achievement. The Emotional Stability / Neuroticism shows the tendency for negative emotions, anxiety, depression and vulnerability. The Openness / Intellect describes the treatment of unusual and new situations with pleasure and not with stress, the enjoyment of spiritual, cultural, social experiences, with imagination and adventurous mood (Costa & McCrae, 1992).

#### 2.2. Gender Characteristics and Big Five Factors Model (BFFM)

The five major factor questionnaires are widely used to attribute gender characteristics (Akyunus et al., 2021; Costa et al., 2001; Manrique-Millones, 2021; Olowookere et al., 2020; Rubinstein, 2005; Sander & de la Fuente, 2020; Shchebetenko, 2017). An important element is the common agreement of the findings in all studies that the Neuroticism scale remains higher in women of all ages (Akyunus et al., 2021; Costa et al., 2001; Manrique-Millones, 2021; Olowookere et al., 2020; Rubinstein, 2005; Sander & de la Fuente, 2020; Shchebetenko, 2017).

The similarities and differences between the sexes concern researchers. It is argued that similar features outweigh the differences. A representative example is the characteristic of aggression for men and increased verbal ability for women (Maccoby and Jacklin, 1974). Traditional roles present men as open-minded, assertive, while presenting women as warmer, happier, more emotional with obedience, attention, and avoidance (Costa, 1992). A review of 46 studies (Hyde, 2005) points out that differences in gender characteristics are related to age and social context. A review of 26 studies (Costa, 2001) confirms that the characteristics of the two sexes differ according to the cultural patterns of the roles for the two sexes. In particular, in the developed countries of Europe and America, as traditional roles change, differences in gender characteristics appear to be widening (Costa, 2001). Nowadays it is accepted that the different characteristics of the two sexes are significantly attributed to social roles but also more broadly to the interaction of environmental factors with genetic and evolutionary processes (Shchebetenko, 2017).

#### 2.3. Personality Traits in Emerging Adulthood and Socioeconomic Factors

Therefore, in emerging adulthood, particular gender characteristics may be identified in the personality, either influenced by traditional role patterns or genetic determinants. Some studies in college students identify statistically significant differences between the sexes in the Agreeableness and Conscientiousness scales (Olowookere et al., 2020; Sander, 2020).

The connection of socioeconomic factors and personality traits has a wide field of theoretical approach and application (Hughes et al., 2021). It has been investigated decades ago until today (Cundiff et al., 2021; Masud et al., 2019). Parents' socioeconomic factors directly influence the

formation of personality traits (Martin & Donnellan, 2021) and indirectly through mediation functions, such as parenting practices, care, abuse and parenting style (Cundiff et al., 2021).

In terms of direct impact, a three-generation study supports the model of interaction between socioeconomic factors and personality traits. The study describes how socioeconomic factors have a cumulative effect on the formation of personality traits for three generations, as disadvantaged material investments affect the formation of negative traits during adolescence, preventing future socio-economic success and prosperity (Martin & Donnellan, 2021). Studies in the past have connected high socioeconomic status with extroversion, agreeableness and openness and low level of neuroticism, in contrast, low socioeconomic status has been associated with low conscientiousness and increased neuroticism (Jonassaint et al., 2011).

According to the above in childhood and adolescence, parents' socioeconomic factors, income and educational level seem to influence the formation of personality traits (Cundiff et al., 2021; Martin & Donnellan, 2021; Yáñez, et al., 2017). The same is said to happen in adulthood (Jonassaint et al., 2009). In contrast, no studies have been identified that investigate the effect of the same socioeconomic factors on students' personality during emerging adulthood. Recently, researchers have been interested in emerging adulthood, discussing the qualitative characteristics of the parental relationship that affect well - being or mental distress (García Mendoza et al., 2019; Goger et al., 2020).

The present study comes to add to the discussion about the connection of the personality-gender-education and profession of parents in the transitional stage of emerging adulthood. The concerns raised are whether in emerging adulthood mental characteristics as personality traits are influenced by the socioeconomic factors of the parents - What kind of connections emerge - Gender after adolescence as a social identity (Erikson, 1993) with genetic predispositions affects personality differently for both sexes. The research questions refer to a sample of undergraduate students and are as follows: a) what are the similarities and differences in traits personality (BFF) for the two sexes and b) if the educational level and the profession of the father and mother are connected with the traits personality (BFF).

#### 3. Method

The research sample consisted of 301 undergraduate students, who studied mainly in their second and third year of study. They participated voluntarily. with a total participation of 223 (74,1%) girls and 78 (25,9%) boys.

#### 3.1. Research Design and Measures

The IPIP-50 item (International Personality Item Pool (IPIP-50 item, Goldberg, 1999) has been weighed in the Greek population (Ypofanti et al., 2015) and measures the five personality factors (Extraversion, Agreeableness, Conscientiousness, stability/Neuroticism, Intellect/Openness) and were distributed through Google Forms. Each factor was assessed by 10 items using a five-point Likert Scale 1 to 5 (Very inaccurate to Very accurate). The questionnaire on socio-economic factors, educational level and profession contained relevant questions. For the educational level of the mother and father separately, the participants were asked, with scaled questions, if they are a graduate: a) elementary, b) high school/Gymnasium, c) high school/lyceum, d) University or graduate student. In Greece, secondary education consists of high school, three grades (lower grade and compulsory) and high school, three grades (upper grade and non-compulsory). For the investigation of the father's profession, the participants were asked if the father is a) Freelancer, b) Public Employee, c) Private Employee, d) Unemployed and for the mother, if she is: a) Freelancer, b)

Public Employee, c) Private Employee, c) Household. In Greece, social research uses this type of discrimination, as it is linked to official institutions and the social professional structure. Similarly, this type of occupational-social structure seems to affect family functioning, parental care and child development (Magklara et al., 2012).

### 3.2. Data Preparation

The Questionnaire IPIP-50 item has been adapted for research needs and it presented high reliability on all scales (Cronbach Alpha: E: .821, A: .821, C: .816, N: .854, O: .746), (xxx, 2022). During the adaptation of the tool (IPIP-50 item), a few language changes were applied to the translation into Greek (Bakola, et al., as showed in ipip.ori.org), in order to adapt it to the needs of the study (Gkatsa, 2022).

Detailed adaptation process: We treated the questionnaire from the beginning with a double translation and then it was given for reverse translation to a speaker who speaks English very well as her mother tongue. A discussion followed on the final form of the questions. The questionnaire was given to a sample of twenty students for pilot application. From this, there were no difficulties in rendering the meanings, and therefore no change was made. Then, a comparative control of the three forms of the questionnaire (1) original in English, 2) translated into Greek (Bakola, et al., as showed in ipip.ori.org), accepted by www.ipip.org and 3) revised format, implemented, to adapt to the research objectives and our research sample (undergraduate students). Significant changes were kept for the psychological normalization of the concepts (A6, A9, A1O, N10, and O9) and six modifications of expressions (Gkatsa, 2022).

#### Pilot test

For the pilot application, the questionnaire was given to students, a random sample of 5% of the total sample. The age ranged from 18 to 40 years. It was completed by 15 people twice with a time difference (t1, t2) of 10 days between the first and second performance of completing the questionnaire. Exactly the same answers were given by the same respondents both times (t1, t2).

#### 3.3. Method and Material

The IBM SPSS Statistics 26 was used to perform the statistical analysis. The aim of the study is to investigate, if there is a statistically significant difference between the characteristics of the five big factors/personality scales with a) gender and b) parents' education/occupation in the transitional stage of emerging adulthood. Initially, we examined the reliability of each scale based on Cronbach's alpha reliability coefficient. Values of this coefficient larger than 0.7 indicate a reliable scale. Afterwards, and in order to examine if there is a statistically significant difference between the two populations related to the mean of the score in the aforementioned scales, we have used the parametric t test. The reason of selecting a parametric procedure instead of the respective nonparametric (i.e., Mann-Whitney test) is that the assumption of normality holds at least asymptotically, since the sample size of each one of the two populations is larger than 50. Before performing the t-test, based on Levine's F-test we test the equality of the population variances in order to decide if the t-test with equal or unequal population variances will be used. Moreover, additional analysis on separate questions will be performed to access if there are statistically significant differences between the two groups. For this purpose, a chi-square test will be used.

#### 4. Results

Girls showed a statistically significant difference compared to boys (sig = .000), with a higher value (M = 4.3359) on the Agreeableness scale: A4 (I sympathize with others' feelings), A8 (I take time out with others), A9 (I feel others' emotions). The boys showed a statistically significant difference compared to the girls (sig = .000), with a higher value (M = 4.3359) on the Emotional Stability / versus Neuroticism scale. In particular, they presented a higher score on questions N1 (I do not get stressed out easily), N2 (I am relaxed most of the time), N3 (I do not worry about things), N5 (I am hardly disturbed), N6 (I get upset hardly), N7 (I change my mood little), N8 (: I do not have frequent mood swings), N9 (I get irritated hardly), N10 (I rarely feel blue), (Table 1, 2).

Table 1. *Group Statistics: Traits Personality and Sex* 

	Sex	N	Mean	Std.	Std. Error
				<b>Deviation</b>	Mean
Agreeableness (A)	Male	78	4,04	0,45	0,05
	Female	223	4,33	0,49	0,03
Emotional Stability (N)	Male	78	3,03	0,77	0,08
	Female	223	2,48	0,71	0,04

Table 2. *Independent Samples Test Levine's Test for Equality of Variances* 

Average	F	Sig.	T	Df	Sig. (2- tailed)
Agreeableness (A)	0,35	0,55	-4,51	300	0,00
Emotional Stability (N)	2,84	0,09	5,69	300	0,00

The multiple Comparisons analysis of variance shows that there is statistically significant difference between parents' education and agreeableness. Children whose mother is an elementary and high school (upper grades) graduate are more likely to have a higher level of affection than children with a mother who has a high school (upper grades) (sig: .020), a university and a master's degree (sig: .012). Also, children whose father is an elementary school (lower grades) graduate have higher level of affection than children with a father who has a university degree and a master's degree. In the correlation between parents' occupation and the agreeableness trend, there is a statistically significant difference for children with a mother who is a civil employee than for children with a mother who is a housewife (sig: .009). Similarly, there is a tendency for higher agreeableness level in children with a father who is a private employee (sig: .041) or self-employed (sig: .003) than children with a father who is a civil employee.

Also, the multiple Comparisons analysis of variance shows that there is a statistically significant difference between parents 'education and conscientiousness. A statistically significant difference is found in the comparisons regarding the educational level of the father. Children with a father who is an elementary school graduate have a greater tendency for conscientiousness than children who have a father who has a high school degree (sig: .002), a university degree or a master's degree (sig: .000) (Table 3).

Table 3. *Personality Traits and Sociodemographic Factors* 

Multiple Comparisons
Dependent Variable: Average Agreeableness
LSD

(I) Mother's Education	(J) Mother's Education	Mean	Std.	Sig.
		Difference (I-J)	Error	
	Elementary school	-0,29*	0,11	0,01
University graduate-	Junior Highschool	-0,19	0,11	0,09
Postgraduate-PhD	Senior Highschool	-0,15*	0,06	0,02
	(Lyceum)			
(I) Father's Education	(J) Father's Education	Mean	Std.	Sig.
		Difference (I-J)	Error	
Elementary school	Junior Highschool	0,18	0,11	,116
	Senior Highschool	0,19*	0,10	,050
	(Lyceum)			
	University graduate-	0,28*	0,10	,005
	Postgraduate-PhD			
(I)parent_profession_	(J)parent_profession_	Mean	Std.	Sig.
mother	mother	Difference (I-J)	Error	
	Private employee	-0,31*	0,12	0,01
Public employee	Freelancer	-0,22	0,12	0,08
	Household	-0,31*	0,12	0,00
(I)parent profession	(J)parent profession	Mean	Std.	Sig.
father	father	Difference (I-J)	Error	G
	private employee	-0,15*	0,08	0,04
Public employee	Freelancer	-0,20*	,07	0,00
	Unemployed	-0,17	0,12	0,17

#### CONSCIOUSNESS

Multiple Comparisons

Dependent Variable: Average Consciousness

LSD

(I) Father's Education	(J) Father's Education	Mean	Std.	Sig.
		Difference (I-J)	Error	
	Junior Highschool	0,47*	0,15	0,00
	Senior Highschool	0,30*	0,13	0,02
Elementary school	(Lyceum)			
	University graduate-	0,51*	0,13	0,00
	Postgraduate-PhD			

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

#### 5. Discussion

#### 5.1. Undergraduate Students' Personality Traits and Gender

Our findings suggest that there is no significant difference between the two sexes in the Extroversion, Intellect / Openness, and Consciousness scales. On the contrary, differences were found between the two sexes in the Emotional stability and Agreeableness scales. In particular, the boys showed higher values in all the characteristics of the Emotional stability scale. It is generally described that compared to female students, male students do not easily get stressed, anxious, or upset. They have stable mood without emotional ups and downs. They do not get annoyed or depressed.

The research data also states that the two genders in our sample differ in the Agreeableness scale and in specific aspects / characteristics of it. According to the data, female students are more interested in others, can empathize with the feelings of others, and sympathize with them. They spend time going out with others as well. In short, female students are more compassionate, empathetic, care more about others, and take more time for them.

All the studies that have investigated the personality traits of both sexes in the student population completely agree with our findings. A first important point is the same finding of superiority of women in the scales of agreeableness and neuroticism. This was also the case with another study which had a sample of Greeks aged 17-75 (Ypofanti et al.,2015). In a recent study by Sander & de la Fuente (2020), Spanish students were surveyed using similar measurement tools, namely self-report questionnaires of the big five factors. Students' personality traits were examined in relation to academic performance. The research results showed that female students showed higher values than young male students in the scale of agreeableness, neuroticism and conscientiousness scale. Rubinstein, (2005) investigated the characteristics (Big five) of both genders in Israeli students from two different schools. The corresponding results showed that female students had higher scores in the agreeableness and conscientiousness scale compared to males.

Manrique-Millones (2021), used a customized questionnaire to study Big Five personality traits in both sexes in a sample of Peruvian men and women aged 16-79 years. Females were found to score higher on the neuroticism scale than males. Another study in Turkey examined the Big Five characteristics in both sexes, and at all age stages in the development cycle. Focusing on the age group of young adults between 18-35 years (average: 24 years old), men were found to have higher scores on honesty and hostile domination, while women scored higher on neuroticism and alignment (Akyunus et al., 2021). Another study among Nigerian students of a private university investigated the gender characteristics of the two sexes and their relationship to academic performance. Female students were found to score higher on the Neuroticism scale.

The above-mentioned similar findings regarding the higher scores of neuroticisms in women are reinforced by the study by Shchebetenko (2017). A sample of 1,030 Russian students responded to a self-report questionnaire and reference questionnaires by other individuals. The study concluded that differences in gender characteristics may have arisen due to the interpretations of these characteristics given by the participants rather than the characteristics themselves. The only scale that still exhibited differences between the two sexes after the adaptations of the characteristics was the neuroticism scale. Thus, it was concluded that the gender difference in neuroticism was not the result of the interpretation of the characteristics by the participants.

From the above it appears that gender differences in personality traits (BFF) are confirmed in our study. Neuroticism is higher in women and this seems to be true in all ages and for all countries, regardless of intercultural, social differences and of the different levels of country development. The difference in neuroticism, without age, cultural, and social limitation, may be attributed to the sexual dimorphism of the two sexes (Shchebetenko, 2017).

Regarding the higher value of the women's agreeableness finding, it is a common result with the aforementioned studies in Greece, Spain and Israel. Possibly, it is common cultural elements of the developed countries (Costa, 2001; Hyde, 2005) that attribute the common features of the agreeableness scale to the female model. The different findings in Peru, Turkey and Nigeria, which have different cultural and social backgrounds and levels of development, are similarly documented (Costa, 2001).

## 5.2. Undergraduate Students' Personality Traits and Parents' Educational Level, Profession

Regarding the second research question, the socioeconomic factors, education and the parents' occupation, showed an independent relation with the three of the five characteristics. In particular, Extraversion, Emotional Stability / Neuroticism, Intellect / Openness, were not related to the educational level and the profession of the parents. Agreeableness and conscientiousness were positively correlated with the low educational level of the mother and the father separately.

In the international literature, the influence of socioeconomic indicators on personality traits (BF) has been widely confirmed (Cheng & Furnham, 2014; Cundiff et al., 2021; Hughes et al., 2021; Martin & Donnellan, 2021; Masud et all, 2019; Yáñez et al., 2017). However, few studies have addressed the personality characteristics of undergraduate students and their relationship to mother's and father's educational attainment and occupation (Jonassaint, 2011).

Emerging adulthood is an intermediate period of development which combines characteristics that belong to the previous and next period. It is a transition of individual evolution and reconstruction (Arnett, 2006, 2015). Central to this is the newly acquired identity and the quality of family relationships. The independent relationship of the three characteristics from the socio-economic parenting factors seems to be justified by the strengthening of their independent individuality. On the other hand, the connection between agreeableness and conscientiousness is associated with characteristics of the family relationship that is shaped by socio-economic factors. It is worth mentioning that there is difficulty in correlating our findings with those of other studies, because researchers do not focus precisely on the distinction of the age period 18-25 years (Oliveira et al., 2020).

There is evidence that personality continuity is built throughout development and that agreeableness starts to be formed at the age of 4.5 years and goes through a difficult phase at the age of 16 years. Parental factors can have a negative impact and indirectly influence agreeableness through negative parenting practices (Baardstu.et al., 2017). In childhood, all researchers support that parents' socioeconomic factors influence personality traits. However, they disagree on which traits they influence (Cheng & Furnham, 2014; Jonassaint, 2011). Cheng & Furnham (2014) argue that socioeconomic factors (social status, parents' occupation) are related to intellect, extraversion, and agreeableness. Takeuchi (2019) argues that socioeconomic factors influence children's cognitive and neurological development from birth. It seems that the socioeconomic level initiates intermediate mechanisms, through the way the parental role is exercised, thus influencing the formation of personality traits both in childhood and adolescence (Cundiff et al., 2021; Jonassaint, 2011). The various aspects of Agreeableness are subject to the ongoing process of development from infancy to childhood and then to adulthood. This development occurs under the influence of biological and significant social and academic changes (Tackett et al., 2019.) Our research finding shows higher agreeableness for students whose father and mother have the lowest level of education. This could be interpreted in the following way. It could be related to childhood and adolescence, when highly educated parents work outside the home. In particular, a mother who is more educated works outside the home, has long working hours, and is probably less involved in the care and upbringing of her children (Bonney et al., 2009), which conversely, may also be the case for parents with a low level of education. In other studies, agreeableness has also been positively correlated with financial data and is associated with attitudes and values, such as risk avoidance, trust, reciprocity, altruism (Becker et al., 2012), while sociability is associated with lower socioeconomic strata and lower wages (Gensowski, 2018).

Our research has, also, found a relationship between father and mother occupation and agreeableness. Students with a father and mother who are self-employed show higher agreeableness. Mothers and fathers who are private employees show less agreeableness than the self-employed category. Both the previous professional categories present a higher score on agreeableness than the public employee category. Huver et al., (2009) argue that parental support, one of the four dimensions of parental care, plays a mediating role between self-employed parents and higher agreeableness in a sample of students. No similar result is observed in other countries. Given that self-employment in Greece is distinguished by an uncertain environment (Magklara et al., 2012), the self-employed invest significantly in human and social relationships. With this finding it is clear that the nature of the profession "freelancer" shows skill in human, social, and interpersonal relationships. In this way parents act as role models for their children (Schmitt-Rodermund, 2004).

Therefore, our findings show the connection between higher Agreeableness with parents' low educational level and the professions of freelancers and private employees. The Agreeableness aspect was found to depend on national and social conditions (Oliveira et al., 2020). Future research is expected to investigate the aforementioned socioeconomic factors that influence the quality characteristics of parental care (support, autonomy, warmth, behavioral and social control) in emerging adulthood in different national and social contexts (García Mendoza et al., 2019; Goger et al., 2020).

In our study, the lower educational level of the father is associated with higher conscientiousness. Conscientiousness in childhood (Jonassaint, 2011) and adolescence (Martin & Donnellan, 2021; Yáñez et al., 2017) is positively related to higher parental educational level. In the literature it is associated with self-regulation and intrinsic motivation leading to academic success (Kaufman et al., 2008).

However, there are contrasting findings regarding emerging adulthood. Delaney et al.'s, (2013) study of the relationship between conscientious undergraduate behavior (optional study, lecture attendance) and noncognitive characteristics of students resulted in an unexpected finding for them. Their research findings stated that family related financial factors, such as family income and financial support to the student, were not associated with conscientious behavior toward students' academic obligations. It is argued that students' conscientiousness and high achievement are associated with endogenous / internal motivations and less with exogenous / external motivations, such as the educational level of the parents. It seems that conscientiousness in emerging adulthood is reshaped and acquires an independent basis for criticism. Towards the same interpretive direction, researchers argue that students from families with low socio-economic status feel obligated for the financial expenses of their family for them and their studies. As a result, many of them want to help their family financially (Napolitano, 2015).

The finding highlights the importance of fatherhood in undergraduate students during emerging adulthood. Several studies have shown the father's unique contribution to developmental characteristics (Sander, 1996), child socioemotional development, and adolescent behavior, but few studies focus on (Hakoyama, 2020) undergraduate students. In light of our research findings, one possible interpretation could be that the association between the low educational level of the father and conscientiousness is due to financial factors and the particular social conditions in Greece. Parents with low levels of education may have fixed working hours, work fewer hours, and spend more time raising and guiding children, and contribute to the development of self-regulation, from which conscientiousness emerges (Eisenberg et al., 2014; Kaufman et al., 2008). In a meta-analytic study, conscientiousness in emerging adulthood has been positively correlated with parental characteristics of controlling behavior, emotions, and

warmth (Prinzie et al., 2009). At this point, the need to investigate more thoroughly the effect of fatherhood, (the parental style of the father) on personality during emerging adulthood, as well as the influence of socioeconomic factors on it, is confirmed (Yaffe, 2020; Van Lissa et all, 2019).

#### 6. Conclusion

Our research findings between the two sexes in undergraduate students identified differences in only two scales Emotional Stability / Neuroticism and Agreeableness. Our finding that male students have a higher value in all aspects of Emotional stability, confirms the consensus in the international literature that female students in all countries have a higher neuroticism. The higher agreeableness among females in the sample seems to support the theory of intercultural difference and social norms for the two sexes. This view is supported by the similarity of our findings with surveys in the Western world and in developed countries.

Socio-economic indicators, educational level and occupation of parents seem to affect the personality traits (BFF) in childhood, adolescence in a different way than in undergraduate students.

In childhood and adolescence, low socioeconomic status affects almost all personality traits (BFF) indirectly and in different ways negatively on their development. Conversely, in our research data, socioeconomic indicators, education and occupation of parents in emerging adulthood appear to affect undergraduate students less and in different ways. Other researchers argue (Delaney et al., 2013; Hughes et al., 2021) that undergraduate students' personality traits are not related to parents' socioeconomic indicators. According to our research data, the low educational level of both parents was positively associated with agreeableness and conscientiousness. Regarding the occupation of both parents, being a freelancer and a private employee was positively associated with higher agreeableness than being a public employee. It was also found that only the fathers' educational level influences the conscientiousness of the students and not the mother's.

As a suggestion for future research, it is recommended to investigate the factors that mediate between the low educational level of the parents and students' agreeableness, conscientiousness, during the phase of emerging adulthood, within the Greek social context, adopting a parallel transnational comparative view. It is also important to explore the qualities of paternal care which, in modern conditions, influence personality traits in emerging adulthood.

The advantage of this report is that socioeconomic factors were considered separately for both parents. A limitation of the study is the unequal representation of the two sexes in the research sample.

#### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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