

INFLUENCE OF GENETIC PREDISPOSITIONS AND ENVIRONMENTAL FACTORS ON THE EMOTIONAL WELLBEING OF YOUNG ADULTS IN UNIVERSITY OF BENIN

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Abstract

Nature-nurture controversy and the origin of emotional well-being is an age-long debate which tries to determine whether Nature (genetics) and Nurture (environmental) factors can influence the emotional health of young adults. This study focused on understanding the Nature-Nurture controversy and the origin of the emotional wellbeing of young adults at the University of Benin. Four research questions were raised to guide this study. A descriptive survey research design was adopted to carry out this study. The population of the study was 44,140 undergraduates in the 2021/2022 academic session. A sample size of 150 was used for the study. The research instrument used for this study was a structured questionnaire which was designed by the researcher. Data collected was analyzed using descriptive statistics such as simple percentage, frequency and mean.

The findings revealed that genetic predisposition (nurture) has an impact on the emotional wellbeing of young adults in University of Benin environmental factors (nurture). Based on these findings the researcher recommended that the school management should implement comprehensive mental health education programs in universities to raise awareness about emotional well-being, stress management, and coping strategies. Additionally, the school management should design and maintain campus environments that promote physical and mental well-being, such as green spaces, quiet study areas, and social gathering places.

Introduction

The nature-nurture controversy has been a central debate in psychology for over a century, focusing on whether human behaviour and development are primarily influenced by genetics (nature) or environment (nurture). This debate has significant implications for understanding emotional well-being, especially among young adults in university settings. Nature proponents argue that genetic predispositions play a crucial role in shaping an individual's emotional responses and mental health. Studies have shown that certain genetic factors can influence the likelihood of developing mental health disorders, such as depression and anxiety; for instance, Jiménez-Guerrero and Ratola (2021) suggested that emotions are evolved adaptations influenced by genetic factors. Iyanda, Iyanda and Adigun (2022) stressed the influence of genetic predisposition and screening on psychological health of University students. They found that genetic predisposition contributed significantly to psychological health of University students. Nurture proponents, on the other hand, emphasize the impact of environmental factors, such as family dynamics, social interactions, and educational experiences, on emotional well-being. Research has demonstrated that supportive environments and positive social interactions can significantly enhance emotional health and resilience (Hunter and Honeycutt, 2019).

Environmental factors encompass a wide range of influences that can significantly shape an individual's emotional health. For young adults in university settings, these factors often include family dynamics, social interactions, academic pressures, and living conditions. Family dynamics are the quality of family relationships and how it play a pivotal role in emotional well-being. Supportive and nurturing family environments contribute to higher levels of self-esteem and lower levels of anxiety and depression. A study by Jiménez-Guerrero and Ratola (2021) highlighted that positive family interactions can buffer against the stressors of university life.

Social Interactions are another environmental factor which refers to peer relationships and social networks these are crucial during young adulthood. Being part of supportive social groups can enhance emotional well-being by providing a sense of belonging and reducing feelings of isolation. Research indicated that students who engage in meaningful social activities and build strong friendships are more likely to experience positive emotional health outcomes (Hunter Honeycutt, 2019). The demands of academic life, including coursework, examinations, and deadlines on assignments, can be significant stressors that affect the emotional well-being of young adult. Universities that offer robust mental health support services, stress management programmes, and accessible counseling can help mitigate these pressures. According to Cherry (2022), managing academic stress effectively is crucial for maintaining emotional balance. Living conditions, which is the physical environment where students reside, such as hostels or off-campus housing, also affects their emotional wellbeing. Safe, clean, and comfortable living conditions can reduce stress and promote a sense of security, which is essential for emotional health. In the context of young adults at the University of Benin, this study explored how both genetic predispositions and environmental factors contribute to their emotional wellbeing. By examining the interplay between nature and nurture, the research seeks to provide a comprehensive understanding of the factors that influence emotional health in this demographic. The emotional wellbeing of young adults in university settings is a complex interplay between genetic predispositions and environmental factors. Many students at the University of Benin face a multitude of stressors, including academic pressures, social dynamics, and living conditions. While genetic predispositions may make some individuals more susceptible to emotional disturbances, environmental factors such as family support, peer relationships, and academic environment play crucial roles in either exacerbating or mitigating these genetic risks. Much of the existing research is based on Western populations Shroff, (2023), which may not fully capture the unique socio-cultural factors affecting Nigerian students.

Despite the fact that research has been carried out on the individual contributions of genetics and environment to mental health, there is a significant dearth of studies that simultaneously consider genetic predispositions and environmental influences on the emotional wellbeing of young adults specifically within the context of Nigerian universities like the University of Benin.

Without a comprehensive understanding of the interplay between nature and nurture, it is challenging to develop effective interventions to support the emotional wellbeing of students. By investigating the combined effects of genetic and environmental factors, this

study aims to provide a holistic understanding of the origins of emotional wellbeing among young adults at the University of Benin. The findings will inform the development of culturally relevant mental health interventions and support systems tailored to the needs of this population.

Methodology

The survey research design was used for this study. This design allow for collection of detailed information from the target population. The population of this study was 44,140 full time undergraduates in the 2022/2023 academic session, across the sixteen faculties in the Ugbowo Campus in University of Benin, Edo State. The age range for the young adults is 17-25 years.

Table 1: Population of the study

S/N	Faculty	Student Population
1	Agriculture	1685*
2	Arts	6262
3	Basic Medical Science	3437
4	Dentistry	111*
5	Education	7476
6	Engineering	5487
7	Environmental Science	1075*
8	Law	1078
9	Management Science	3506
10	Medicine	685*
14	Life Science	5132
15	Pharmacy	1107
16	Physical Science	3283*
15	Social Science	3411
16	Veterinary Medicine	70
17	Other Services	461*
Total		44,140

Source: Academics planning unit, student affairs Division, university of Benin, Ugbowo Campus (2023). **(The asterisk * faculties were systematically sampled for the study)**

The sample size for this study was 150 respondents. This was drawn using the multistage sampling technique. In the first stage, the systematic sampling technique was used to select 35% of the faculties in the University of Benin. The selection was done by establishing an interval of three, thereafter the first faculty was selected randomly then every other third faculty was selected. Hence, six out of seventeen faculties was selected. In the second, stage the researcher use simple random sampling technique to selected one department. The third stage the researcher used purposive sampling technique to select twenty-five respondents from the six departments.

The instrument used was a self-designed questionnaire that consists of two (2) sections, namely Section A and Section B. Section A elicited information based on the respondents Bio-data or personal information and section B Which consisted of twenty (20) items was used to elicit responses from the respondents in line with the research questions. The instrument is based on four (4) point rating scale (Liker response scale) where the respondent is to tick either "Strongly Agree", "Agree", "Disagree", or "Strongly Disagree". The instrument was validated by three experts in the department of health, safety and environmental education. Their recommendations were used to produce the final copy of the instrument. In order to determine the reliability of the instrument, test-retest reliability method was used. The scores obtained from the test were subjected to a Pearson Moment Correlation Coefficient statistic to obtain a coefficient of 0.723 which shows that the instrument was reliable for use by the researcher. The researchers administered copies of questionnaire to the respondents. The completed questionnaire was analysed using descriptive statistics of frequency count, percentage, mean and standard deviation.

Results

Research Question 1: What impact does nature (genetic predispositions) have on the emotional well-being of young adults in University of Benin?

Table 2: Distribution of percentage and frequency on the impact of genetic predispositions on the emotional well-being of young adults

	ITEMS	SA (%)	A (%)	D (%)	SD (%)	M	Sd	D
1	Having a genetic disease can influence the emotional health of the individual	92 (61.3%)	38.0 (39%)	1 (0.7%)	0 (0%)	3.50	0.53	Agreed
2	A Student disability can influence his passion to study	56 (37.3%)	74 (49.3%)	14 (9.3%)	6 (4.0%)	3.20	0.77	Agreed
3	shortsightedness of a students can lead to emotional health problem	36 (24.0%)	58 (38.7%)	32 (21.3%)	24 (16.0%)	2.71	1.01	Agreed
4	Inability of the student to assimilate can be due to the impact of nature	44 (29.3%)	64 (42.7%)	26 (17.3%)	16 (10.7%)	2.90	0.94	Agreed
5	A student with a mental disease can be affected emotionally	89 (59.3%)	50 (33.3%)	8 (5.3%)	2 (2.0%)	3.50	0.70	Agreed

Cluster mean=3.18 mean >2.5 Agreed < 2.4 Disagreed

Table 2 shows the impact that genetic predispositions have on the emotional well-being of young adults in University of Benin. From the results gotten in item 1, majority (99.3%) of

the respondents agreed that having a genetic disease could influence the emotional health of the individual while only 0.7% of the respondents disagreed. The mean=3.50 which indicated that the decision was agreed. Item 2 results portrayed that majority (86.6%) of the respondents agreed that a student disability can influence his passion to study, while only 13.3% disagreed. The item mean=3.20 which indicates that the decision is agreed. Item 3 results portrays that majority (62.7%) of the respondents agrees that shortsightedness of a student can lead to emotional health problem, while only 37.3% of the respondents disagreed. The item mean=2.71 which indicates that the decision is agreed. Item 4 results portrays that Majority (72.0%) of the respondents agrees that inability of the student to assimilate, while only 28.0% of the respondents disagreed. The item mean=2.90 indicates that the decision is agreed. Item 5 results reveals that majority (92.6%) of the respondents agrees that a student with a mental disease can be affected Emotionally, while only 7.3% disagreed. the item mean=3.50, which indicates that the decision is agreed. Based on the research data collected from table two, genetic predispositions has an impact on the emotional wellbeing of young adults in university of Benin. As three out of the five items had a mean score greater than the cluster mean of 3.18.

Research Question 2: What impact does nurture (environmental factors) have on emotional well-being of young adults in University of Benin?

Table 3: Distribution of percentage and frequency on impact of environmental factors on emotional wellbeing of young adults

	ITEMS	SA (%)	A (%)	D (%)	SD (%)	M	Sd	D
6	Disownment of the young adults by parents can affect emotional health	86 (57.3%)	57 (38.0%)	5 (3.3%)	2 (1.3%)	3.51	0.63	Agreed
7	Socio-economic status of the family can affect the well-being of young adults.	60 (40.0%)	77 (51.3%)	7 (4.7%)	6 (4.0%)	3.27	0.73	Agreed
8	Students experiencing family disunity perform poorly in academics	59 (39.3%)	65 (43.3%)	23 (15.3%)	9 (2.0%)	3.20	0.77	Agreed
9	Inadequate healthy food affects young adults emotional health	53 (35.3%)	79 (52.7%)	6 (4.0%)	(8.0%)	3.15	0.83	Agreed
10	Parental upbringing can influence the emotional health of young adults	68 (45.3%)	63 (42.0%)	12 (8.0%)	7 (4.7%)	3.28	0.80	Agreed

Cluster mean=3.20 mean >2.5 Agreed <2.4 Disagreed

Table 3 shows the impact that environmental factors had on emotional well-being of young adult in University of Benin. The results gotten from item 6 revealed that majority (95.3 %)

of the respondents accepted that disownment of the young adults by parents can affect the emotional health while only 4.7% of the respondents did not accept that disownment of the young adults by parents can affect their emotional health. The item mean=3.51 which indicated that the decision was agreed. Item 7 results portrayed that majority (91.3%) of the respondents agreed that socioeconomic status of family can affect the wellbeing of young adults while only 8.7% of the respondents disagreed. The item mean=3.27 which indicated that the decision was agreed. Item 8 results portrayed that majority (82.6%) of the respondents agreed that students experiencing family disunity performs poorly in academics, while 17.3% of the respondents disagreed. The mean=3.20 which indicated that the decision was agreed. Item 9 results portrayed (88.0%) of the respondents agreed that in-access to health food affects young adults emotional health, while 12.0% of the respondents disagreed. The mean=3.15 indicated that the decision is agreed. Item 5 results portrayed that majority (87.3%) of the respondents agreed that parental upbringing can influence the emotional health of young adults, while 12.7% disagreed. The mean=3.28 indicates that the decision is agreed. According to research data collected from Table 3, environmental factor (nurture) had an impact on the emotional wellbeing of young adults. This was because the mean score of four out of the five items is greater than the cluster mean.

Research Question 3: Does the interaction of nature-nurture predisposes young adults to emotional illness?

Table 4: Distribution of interaction that predispose young adult

	Items	Sa (%)	A (%)	D (%)	SD (%)	M	Sd	D
11	Poverty is linked with emotional breakdown on young adults	56 (37.3%)	73 (48.7%)	9 (6.0%)	12 (8.0%)	3.15	0.86	Agreed
12	A paralyzed young adult gets depressed often	60 (40.0%)	73 (48.7%)	9 (6.0%)	8 (5.3%)	3.23	0.79	Agreed
13	A mentally stressed young adult have issues with decision making	72 (48.0%)	64 (42.7%)	6 (4.0%)	8 (5.3%)	3.33	0.79	Agreed
14	Strict parenting style can affect the young adults emotionally	79 (52.7%)	49 (31.3%)	14 (9.3%)	10 (6.7%)	2.91	0.10	Agreed
15	The adverse childhood experiences faced by young adults can affect emotional well-being	88 (58.7%)	51 (34.0%)	6 (4.0%)	5 (3.3%)	3.33	0.75	Agreed

Cluster Mean=3.20 >2.5 Agreed < 2.4 Disagreed >

Table 4 shows the interaction of nature–nurture that predisposed young adults to emotional illness among students in the University of Benin. The results gotten from item 11 revealed that majority (86.0%) of the respondents agreed that poverty was linked with emotional breakdown on the young adults, while only 14.0% of the respondents disagreed the mean=3.15 indicated that the decision was agreed. Item 12 results interprets that mainstream (88.7%) of the respondents agreed that paralyzed young adults get depressed often, while 12.3% of the respondents disagreed, the mean=3.23 indicated that the decision is agreed. Item 13 depicts that bulk (90.7%) of the respondents agreed that a mentally stressed young adults had issues with decision making, while 9.3% of the respondents disagreed, the mean=3.33 indicated that the decision was agreed. Item 14 shows that majority (84.0%) of the respondents agreed that strict parenting style can affect the young adult emotionally, while 16.0% of the respondents disagreed the mean=2.91 indicated that the decision was agreed. Item 15 reveals that majority (92.7%) of the respondents agreed that adverse childhood faces by young adults can affect the emotional well-being, while 8.3% disagreed the mean=3.33, indicated that the decision was agreed.

Based on the research data collected from Table 4, to investigate if the interaction of nature-nurture predispose young adults to emotional illness, the result revealed that there was an interaction of nature- nurture on young adults emotional illness. This was because the mean score of three out of the five items is greater than or equal to the cluster mean.

Research Question 4: What strategies are employed to help students cope with emotional illness?

Table 5: Distribution of strategies that were employed to help students cope with emotional illness

	ITEMS	SA (%)	A (%)	D (%)	SD (%)	M	STD	D
16	Engaging in physical activities help to solve emotional health of young adults	64 (42.7%)	77 (51.3%)	6 (4.0%)	3 (2.0%)	3.61	3.38	Agreed
17	Having a good social support network can help young adults improve emotional health	85 (3.356.7%)	55 (36.7%)	5 (3.3%)	5 (3.3%)	3.47	0.72	Agreed
18	Going on a vacation can help improve the emotional health of an individual	66 (44.0%)	67 (44.7%)	7 (4.7%)	10 (6.7%)	3.26	0.83	Agreed

19	Confiding in parents help one overcome challenges and boost emotional health	54 (36.0%)	78 (52.0%)	10 (6.7%)	8 (5.3%)	3.19	0.78	Agreed
20	Self isolation is a way of improving emotional health of young adults	30 (20.0%)	42 (28.0%)	32 (21.3%)	46 (30.7%)	2.37	1.13	Disagree

FFFF Cluster Mean=3.43mean>2.5Agreed<2.4 Disagreed

Table 5 shows the strategies that can be employed to help students cope with emotional illness in University of Benin. The results gotten from item 16 revealed that 94% of the respondents engaged in physical activities help to solve emotional health of young adults while 6.0% of the respondents did not engage in physical activities help to solve emotional health of young adults the mean=3.61 indicated that the decision was agreed. Item 17 depicted that majority (93.4%) of the respondents agreed that the having a good social support network can help young adults improve their emotional health, while 6.3% of the respondents disagreed the mean=3.47, which indicated that the decision was agreed. Item 18 shows that majority (88.7%) of the respondents agreed that going on a vacation can help to improve the emotional health of the individual, while 12.3% of the respondents disagree the mean=3.26 which indicated that the decision was agreed. Item 19 portrayed the majority (88.0%) of the respondents agreed that confiding in our parents help us overcome challenges and boost emotional health, while 12.0% of the respondents disagreed, the mean=3.19, which indicated that the decision was agreed. Item 20 revealed that minority (48.0%) of the respondents agreed that self-isolation was a way of improving emotional health of young adults, while majority 52.0% of the respondents disagreed, the mean=2.37 indicated that the decision was disagreed.

Based on the research data collected from Table 5, the positive coping strategies that can be employed by students to cope with emotional illness were engaging in physical activities, having good social support network, going on a vacation and confiding in parents. As these items had a mean score greater than the cluster mean. Meanwhile, self-isolation does not help students cope with emotional illness, as the mean score was less than the cluster mean.

Discussion of findings

The result from this study revealed that genetic predisposition (nature) had an impact on the emotional wellbeing of young adults in University of Benin as majority of the respondents agreed that nature can impact their emotional wellbeing. This finding corroborated with the study of Harpin (2015) that revealed that Attention Deficit Hyperactivity Disorder (ADHD) is considered a chronic and debilitating disorder and is known to impact individual in many aspects of life including academic and professional achievements, interpersonal relationships, and daily functioning.

Findings from this study further revealed that environmental factors (nurture) impacted the emotional wellbeing of young adults. This can be related to students experiencing family disunity, and mentally stressed young adults having issues with decision making, also strict parenting style can affect the young adult emotionally. This finding is in accordance with Hugiera (2019) study, which revealed that children who are emotionally ill learn to be self-reliant at a young age, they also develop low self-esteem, having coping issues, having difficulty associating or engaging with people because of the emotional detachment from their parents.

In addition to this, another item which stated that "parental upbringing can influence the emotional health of young adult also corroborates with Cherry (2022) study, which the findings revealed that permissive parenting is a parenting style characterized by low demands with high responsiveness.

The finding from this study also revealed that the interaction of nature-nurture can predispose young adults to emotional illness. This can be related to one of the items in this study that strict parental style can affect young adults emotionally this corroborates with the study of Cherry (2022), which revealed that "uninvolved parenting, sometimes referred to as neglectful parenting, is a style characterized by a lack of responsiveness to a child's need". In addition the finding of this study also revealed that a mentally stressed adult have issues with decision making this finding supports Beaton et al., (2022) study that stated that Adults with ADHD may experience poor self-worth, sensitivity towards criticism, and increased self-criticism possibly stemming from higher levels of criticism throughout life. This one of the factors that can predispose young adults to emotional illness just like how a paralyzed young adult also get depressed because he or she is limited to certain things such can't participate in other activities, and gets emotionally depressed when seems other students engaging in different activities

The result from this study also revealed strategies that can help students cope with emotional illness, which are engaging in physical activities, having a good social support network, going on a vacation and confiding in parents. This finding corroborates with the study of Holt-Lunstad et al (2022) having a strong network of friends and family can provide emotional support during challenging times.

Conclusion

Genetic predisposition (nurture) has an impact on the emotional wellbeing of young adults in University of Benin. Environmental factor (nurture) had an impact on the emotional wellbeing of young adults. The result revealed that there was an interaction of nature-nurture on young adults emotional illness. The coping strategies that can be employed by students to cope with emotional illness are engaging in physical activities, having a good social support network, going on a vacation, confiding in parents. Based on the conclusion of this work, the following recommendations were made:

- 1) School management should implement comprehensive mental health education programmes in the university to raise awareness about emotional well-being, stress management, and coping strategies.

- 2) The school management should design and maintain campus environments that promote physical and mental well-being, such as green spaces, quiet study areas, and social gathering places.
- 3) Health educators/counsellors should screen students for mental health issues and provide early intervention to prevent the escalation of problems.
- 4) Health educators should encourage healthy lifestyle habits, such as regular exercise, balanced diet, and adequate sleep.

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