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(RESEARCH ARTICLE)

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Assessment of mental well-being and its relationship with big five personality traits among health care students

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Abstract

AIM: To assess the Mental well-being of Health care students and examine its relationship with the Big Five personality traits.

Objectives: 1. measure the Mental well-being of Health care students. 2. To evaluate the personality traits of students . 3. To Study the Personality traits With Demographic Parameters .4. To Study the association between demographic parameters And Personality traits. 5To study the association between mental well-being and personality traits.

Results: The sample was predominantly young (84.2% aged 18–21) and majority female (66.7%). Mental well-being levels were mostly low to moderate, with only 3.1% reporting high well-being. Personality traits showed varied distributions, with many ambiverts and cooperative individuals. Chi-square tests revealed no significant associations between personality traits and well-being.

Discussion: The young, female-majority sample reflects common university-based recruitment trends. Low mental well-being levels align with known stressors in young adulthood. Diverse personality profiles suggest balanced traits, but anxiety remains a concern. The lack of significant associations may stem from sample homogeneity or external influences.

Conclusion; The findings highlight the mental health vulnerabilities of young adult populations. Gender and age showed no significant links to personality traits in this sample. Despite literature suggesting trait–well-being links, no significant associations were found. Future research should explore broader, more diverse samples and consider contextual factors.

Keywords: Mental wellbeing; Warwick Edinburgh Scale; Personality Traits; Mental health

1. Introduction

The mental well-being of healthcare students has become an increasingly vital area of research in recent years. These individuals undergo rigorous training that is often accompanied by significant stress and anxiety. Such pressures can negatively impact their mental health, leading to issues such as burnout, depression, and decreased academic performance (Dyrbye et al., 2006). As these students prepare for demanding careers in health professions, it is critical to understand the factors that contribute to their overall mental health to create supportive educational environments.

Furthermore, personality traits play a substantial role in shaping students' mental well-being. Traits such as resilience, empathy, and emotional stability are crucial for navigating the challenges of healthcare education. Studies have

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indicated that students who exhibit higher levels of emotional stability and resilience tend to cope better with stress, leading to improved mental health outcomes (Roff et al., 2005). Understanding these personality traits can inform educators of the support needed for students with varying characteristics, enhancing their ability to succeed academically and professionally.

Research also indicates a correlation between mental health and academic performance among healthcare students. Positive mental well-being not only fosters a conducive learning environment but also contributes to better patient care in the long run. When students feel mentally supported, they are more likely to engage meaningfully with their studies and develop the skills necessary for their future roles in healthcare (Dyrbye et al., 2006). Therefore, assessing mental well-being alongside personality traits can yield valuable insights into the holistic development of future healthcare professionals.

2. Materials and methods

2.1. Study type

The cross-sectional study was conducted among Health care students aged 18–25 years at A.C.S Medical College and Hospital.

2.2. Study population

2.2.1. Inclusion criteria

- Students enrolled in undergraduate or postgraduate programs.
- Willingness to participate in the study.
- Ability to comprehend and respond to the survey in the chosen language.

Exclusion criteria: Individuals with a known clinical diagnosis of severe mental health disorders (e.g., major depressive disorder, bipolar disorder) that could confound results.

Incomplete responses to validated scales

2.3. Sample size and population

5200 participants were included in the study according to inclusion criteria and duration of the study was 6 months

2.4. Ethical

The study was approved by the institutional ethical committee, informed consent were obtained from all the participant (no.972/2023/IEC/ACSMCH Dt.17/04/2024)

3. Results

3.1. Section 1 distribution of demographic parameters, personality traits and Warwick Edinburgh mental well being

Table 1 Age distribution

AGE N=520		
Distribution	**Frequency**	**Percent**
18-19	252	48.5
20-21	186	35.8
22-23	69	13.3
24-25	7	1.3
26-27	6	1.2
Total	520	100.0

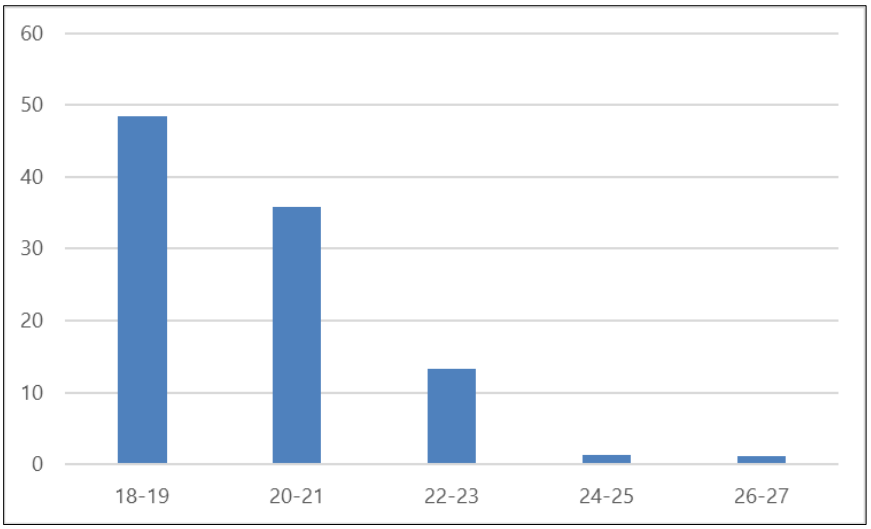

Figure 1 Age

The frequency table reveals that the majority of individuals in the population are concentrated in the younger age groups. Specifically, 48.5% of the population falls into Age 18 to 19 years, while 35.8% is in Age 19 to 20 years, making up a combined 84.2% of the total. Age 21-22 years has a smaller portion of 13.3%, and Age 23 to 24 and Age 25 to 26 years have even fewer individuals, at 1.3% and 1.2%, respectively. This distribution shows a significant skew toward the younger ages, with only a minimal representation in the older categories.

Table 2 gender distribution

Gender	n=520	
Distribution	**Frequency**	**Percent**
male	173	33.3
female	347	66.7
Total	520	100.0

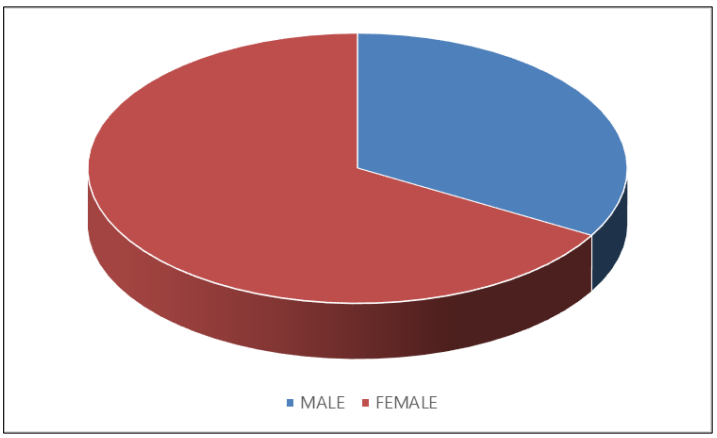

Figure 2 Gender

The given data represents the distribution of individuals based on gender. Out of the total population surveyed, 173 individuals, accounting for 33.3%, are male, while 347 individuals, making up 66.7%, are female. This indicates that females constitute a significantly larger proportion of the group compared to males, with their frequency being approximately twice that of males.

Table 3 Mental well being scale interpretation

Mental well being scale	Frequency	Percent
Low mental being (>43)	265	51.0
Moderate mental well being (43-60)	239	46.0
High mental well being (<60)	16	3.1
Total	520	100.0

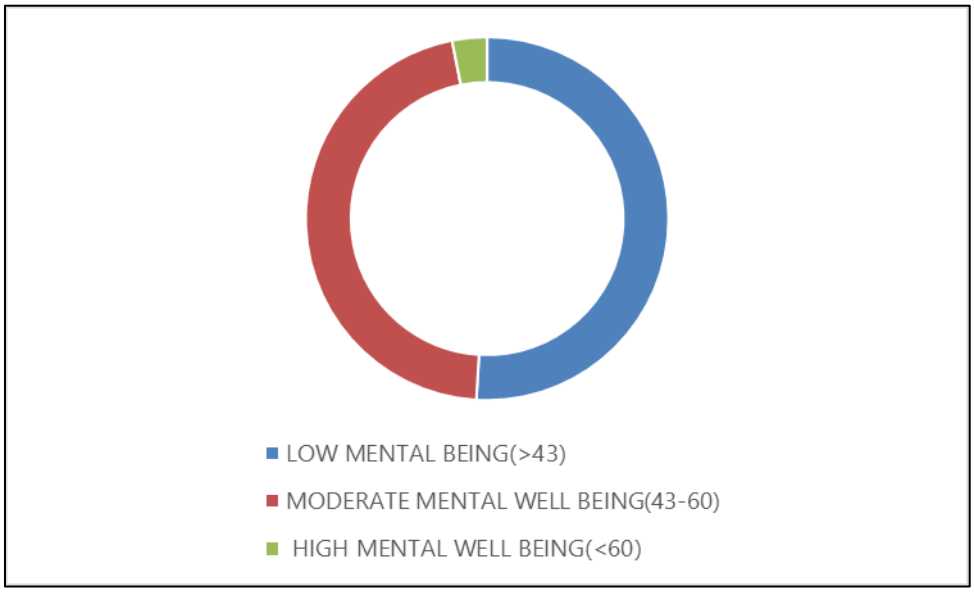

Figure 3 Mental well-being

A majority of the respondents, 265 individuals (51.0%), fall into the low mental well-being category, indicating that more than half of the population experiences significant mental health challenges. The second-largest group consists of 239 individuals (46.0%) who report moderate mental well-being, suggesting that nearly half of the population experiences a balanced but potentially fluctuating mental state. Only a small fraction, 16 individuals (3.1%), report high mental well-being, highlighting that very few individuals experience consistently strong mental health.

Table 4 Overall statistics distribution

Statistics					
	Extraversion	Agreeableness	Conscientiousness	Neuroticism	Openness To Experience
N	520	520	520	520	520
Mean	2.88	3.35	3.05	3.08	3.20
Median	3.00	3.00	3.00	3.00	3.00
Mode	2	4	3	3	3
Std. Deviation	1.002	.930	.845	.862	.807
Minimum	1	0	1	1	1

Table 5 Extraversion

N=520		
Extraversion	**Frequency**	**Percent**
Reserved	158	30.4
Highly assertive	164	31.5
Ambiverted	198	38.1
Total	520	100.0

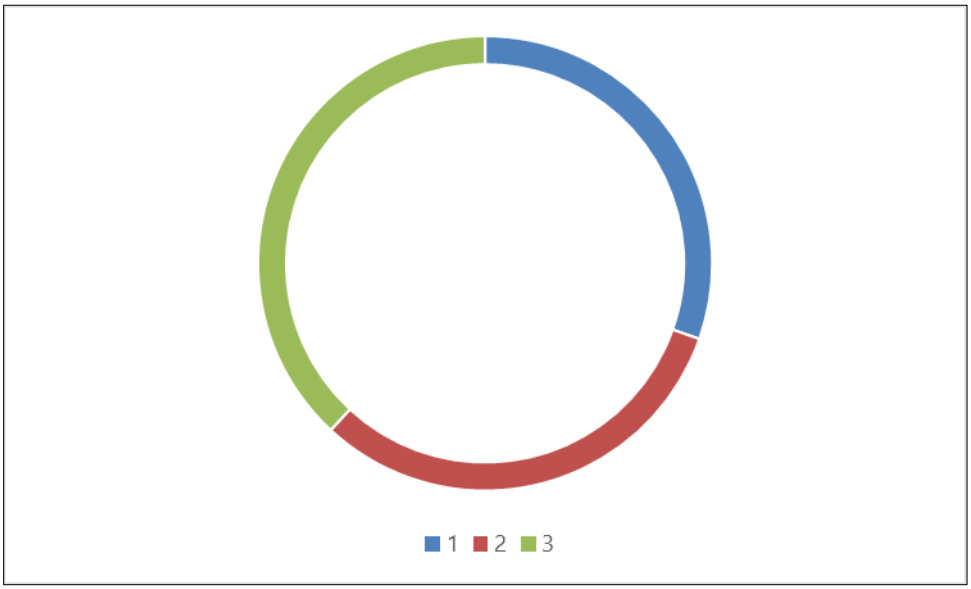

Figure 4 Extraversion

Among the respondents, 198 individuals (38.1%) are ambiverted, indicating that they exhibit a balance between introversion and extraversion. This suggests that a significant portion of the population can adapt to both social and solitary environments. Meanwhile, 164 individuals (31.5%) fall into the highly assertive category, meaning they are confident, outgoing, and socially dominant. Lastly, the reserved category comprises 158 individuals (30.4%), indicating that they are more introverted and prefer less social interaction.

Table 6 Agreeableness

N=520		
Agreeableness	**Frequency**	**Percent**
Critical	38	7.3
Cooperative	257	49.4
Balanced	225	43.3
Total	520	100.0

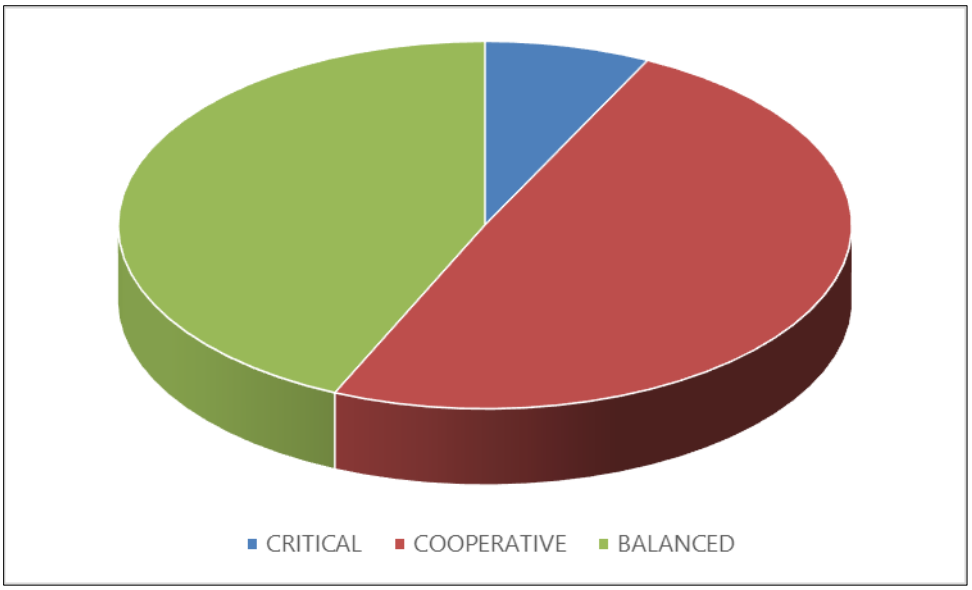

Figure 5 Agreeableness

The largest group, consisting of 257 individuals (49.4%), falls under the cooperative category, indicating that nearly half of the respondents are empathetic, trusting, and inclined to work well with others. The balanced category follows closely, with 225 individuals (43.3%), suggesting that a significant portion of the population exhibits a mix of both cooperative and critical traits, adapting their behavior based on the situation. Only a small fraction, 38 individuals (7.3%), are categorized as critical, meaning they tend to be more skeptical, straightforward, and less inclined to compromise

Table 7 conscientiousness

Conscientiousness	Frequency	Percent
Disorganized	60	11.5
Perfectionistic	169	32.5
Flexible	291	56.0
Total	520	100.0

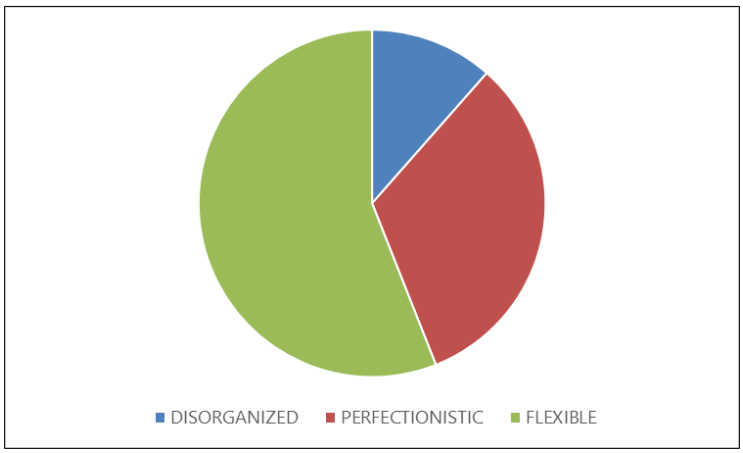

Figure 6 Conscientiousness

The majority of respondents, 291 individuals (56.0%), fall into the flexible category, indicating that they demonstrate a balanced and adaptable approach to tasks, maintaining a sense of responsibility without being overly rigid. The second-largest group, comprising 169 individuals (32.5%), is perfectionistic, meaning they have high standards, are detail-oriented, and strive for excellence in their work. A smaller portion, 60 individuals (11.5%), are classified as disorganized, suggesting difficulties with structure, planning, and task management

Table 8 Neuroticism

N=520		
Neuroticism	**Frequency**	**Percent**
Emotionally Stable	71	13.7
Anxious	180	34.6
Manages Stress	269	51.7
Total	520	100.0

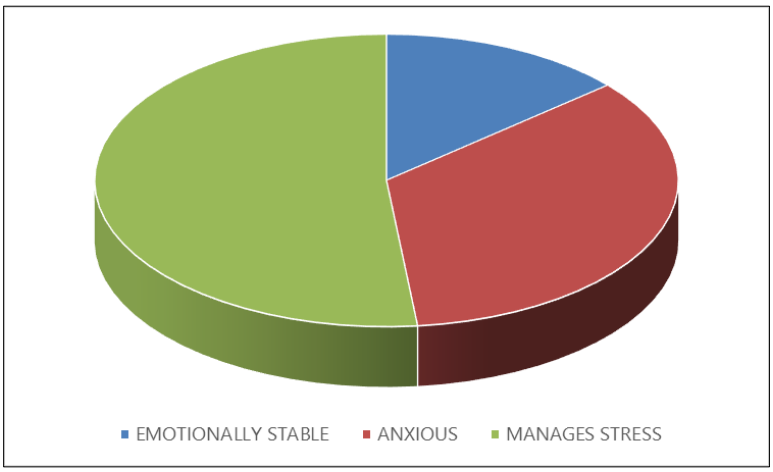

Figure 7 Neuroticism

The majority, 269 individuals (51.7%), fall into the "manages stress" category, indicating that more than half of the respondents have developed coping mechanisms to handle stress and emotional challenges. The second-largest group, consisting of 180 individuals (34.6%), is categorized as anxious, suggesting that a significant portion of the population experiences heightened emotional sensitivity, stress, or worry. A smaller group of 71 individuals (13.7%) is classified as emotionally stable, meaning they exhibit resilience and minimal emotional fluctuations.

Table 9 Openness to Experience

Openness To Experience	**Frequency**	**Percent**
Traditional	36	6.9
Innovative	191	36.7
Adaptive	293	56.3
Total	520	100.0

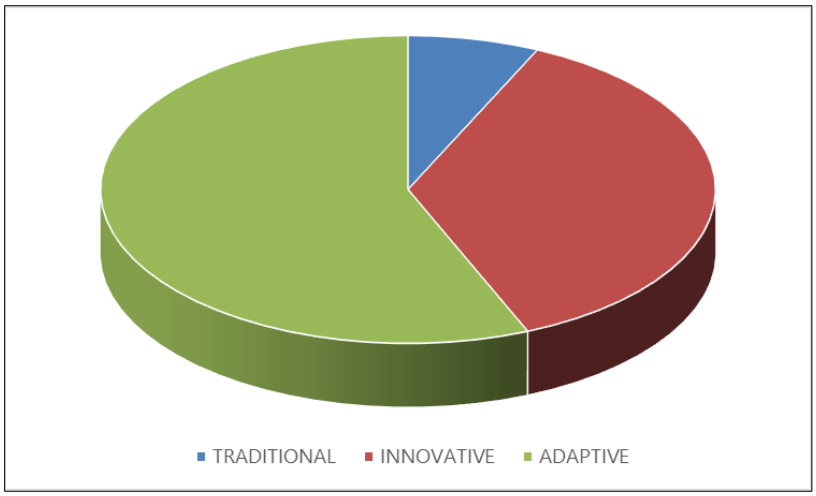

Figure 8 openness to experience

The majority of respondents, 293 individuals (56.3%), fall into the adaptive category, indicating that they are flexible and open to change while maintaining a balance between tradition and innovation. The second-largest group, consisting of 191 individuals (36.7%), is classified as innovative, suggesting that a significant portion of the population actively seeks new ideas, creativity, and unconventional approaches. A smaller group of 36 individuals (6.9%) is categorized as traditional, meaning they prefer familiar methods, stability, and adherence to established norms.

3.2. Section 2 association of personality traits with Warwick Edinburgh mental well being

Table 10 Association of extraversion and Warwick Edinburgh mental well being

Extraversion	Warwick Edinburgh Mental Well Being Scale			Total
	Low Mental Well Being	Moderate Well Being	High Mental Well Being	
Reserved	75	75	8	158
Highly Assertive	82	76	6	164
Ambiverted	108	88	2	198
Total	265	239	16	520

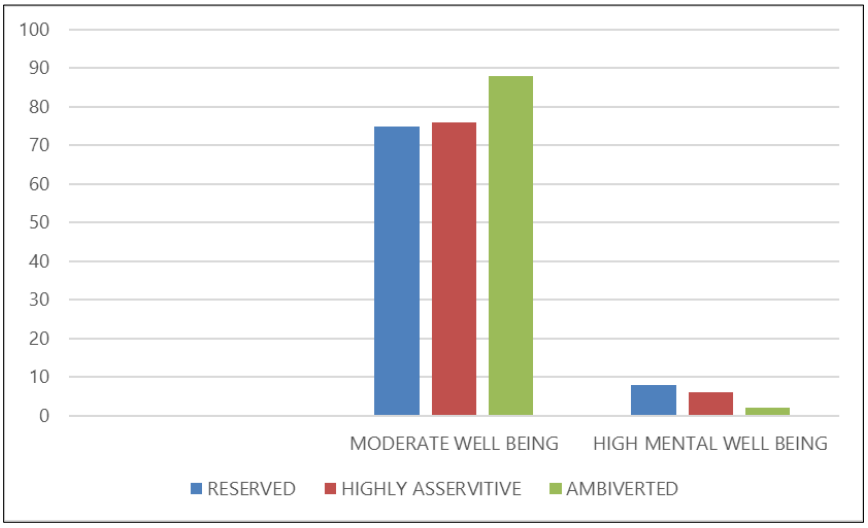

Figure 9 association of extraversion and Warwick Edinburgh mental well being

N=520 the study explores the link between extraversion and mental well-being using a sample of 520 individuals. The distribution of well-being levels across reserved, highly assertive, and ambiverted individuals shows no significant pattern. The Chi-Square test result (p = 0.196) suggests no meaningful association between extraversion and mental well-being.

Table 11 association of agreeableness and Warwick Edinburgh mental wellbeing scale

Agreeableness	**Warwick Edinburgh mental wellbeing scale**			**Total**
	Low mental well being	**Moderate well being**	**High mental well being**	
Critical	15	21	2	38
Cooperative	129	118	10	257
Balanced	121	100	4	225
Total	265	239	16	520

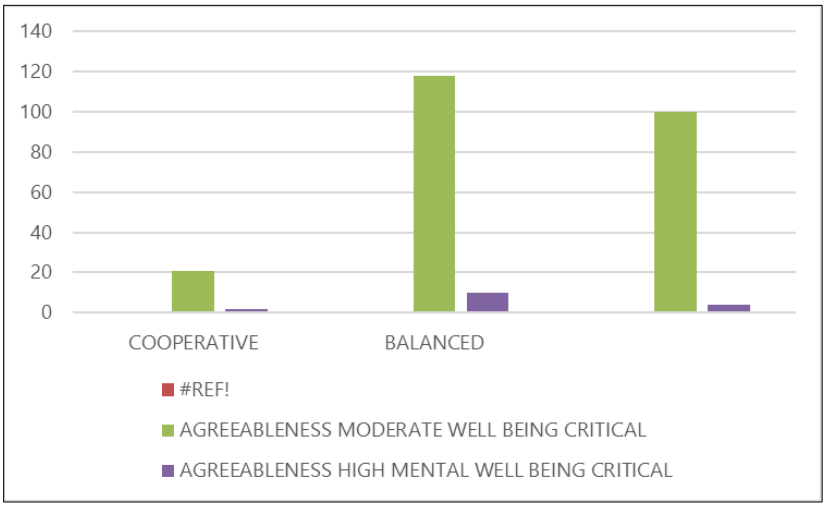

Figure 10 Association of agreeableness and Warwick Edinburgh mental wellbeing scale

The analysis examines the relationship between agreeableness and mental well-being among 520 individuals. The distribution shows that individuals classified as critical, cooperative, and balanced have varying levels of mental well-being. However, the Chi-Square test result (p = 0.491) indicates no statistically significant association between agreeableness and mental well-being.

Table 12 Association of Conscientiousness and Warwick Edinburgh Mental Well Being

N=520				
Conscientiousness	**Warwick Edinburgh mental wellbeing scale**			**Total**
	Low mental well being	**Moderate well being**	**High mental well being**	
Disorganized	30	28	2	60
Perfectionistic	95	68	6	169
Flexible	140	143	8	291
Total	265	239	16	520

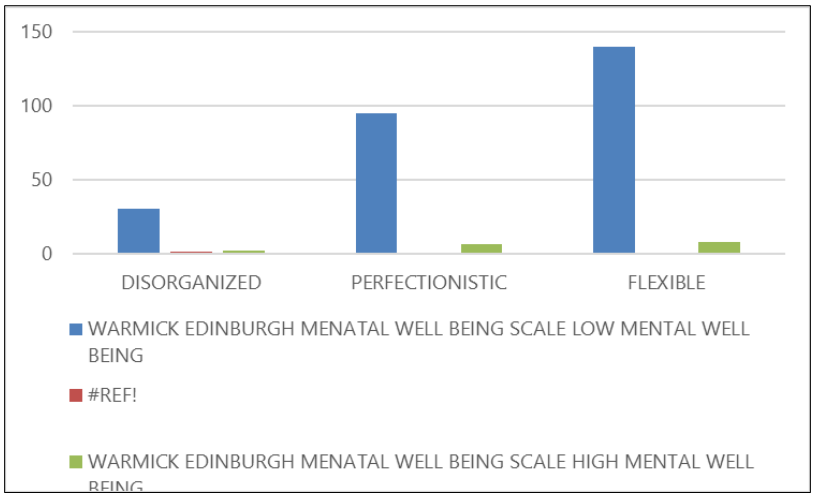

Figure 11 Association of conscientiousness and Warwick Edinburgh mental well being

The study explores the relationship between conscientiousness and mental well-being among 520 individuals. The distribution of well-being levels across disorganized, perfectionistic, and flexible individuals shows some variation. However, the Chi-Square test result (p = 0.481) indicates no statistically significant association between conscientiousness and mental well-being.

Table 13 association of neuroticism and Warwick Edinburgh mental well being scale

N=520				
Neuroticism	**Warwick Edinburgh mental wellbeing scale**			**Total**
	Low mental well being	**Moderate well being**	**High mental well being**	
Emotionally stable	34	34	3	71
Anxious	89	88	3	180
Manages stress	142	117	10	269
Total	265	239	16	520

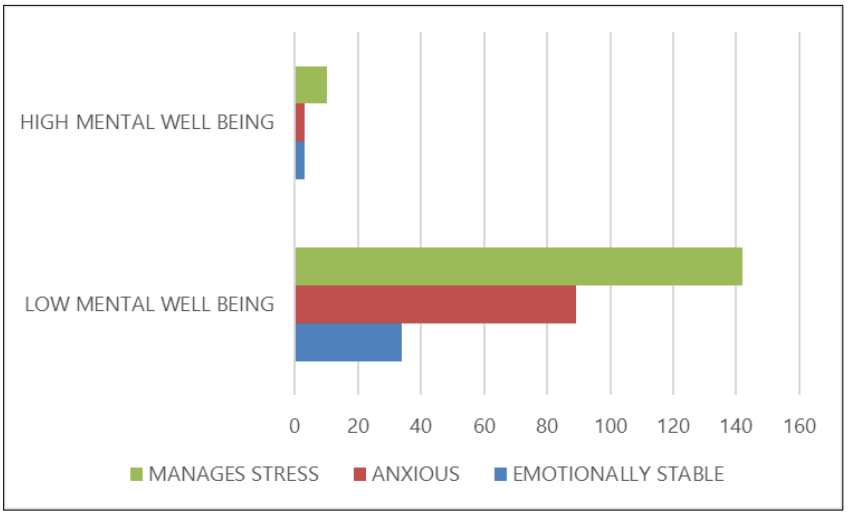

Figure 12 association of neuroticism and Warwick Edinburgh mental well being scale

The analysis assesses the relationship between neuroticism and mental well-being among 520 individuals. Mental well-being levels differ across those who are emotionally stable, anxious, and manage stress. However, the Chi-Square test result (p = 0.564) reveals no statistically significant association between neuroticism and mental well-being.

Table 14 association of openness to experience and Warwick Edinburgh mental wellbeing scale

n=520				
Openness to experience	**Warwick Edinburgh mental wellbeing scale**			**Total**
	Low mental well being	**Moderate well being**	**Low mental well being**	**Moderate well being**
Traditional	18	18	0	36
Innovative	98	89	4	191
Adaptive	149	132	12	293
Total	265	239	16	520

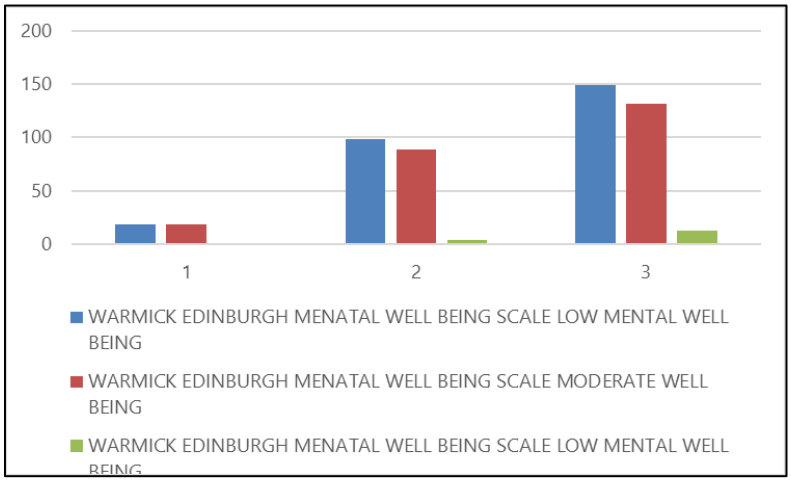

Figure 13 association of openness to experience and Warwick Edinburgh mental wellbeing scale

The analysis examines the relationship between openness to experience and mental well-being among 520 individuals. The distribution of mental well-being levels across traditional, innovative, and adaptive individuals shows some variation. However, the Chi-Square test result (p = 0.574) indicates no statistically significant association between openness to experience and mental well-being

3.3. Section 3 association of personality traits with demographic parameters

Table 15 association of extraversion to age distribution

N=520						
EXTRAVERSION	**AGE**					**Total**
	18-19	**20-21**	**22-23**	**24-25**	**26-27**	
RESERVED	84	47	25	2	0	158
HIGHLY ASSERVITIVE	79	60	21	3	1	164
AMBIVERTED	89	79	23	2	5	198
Total	252	186	69	7	6	520

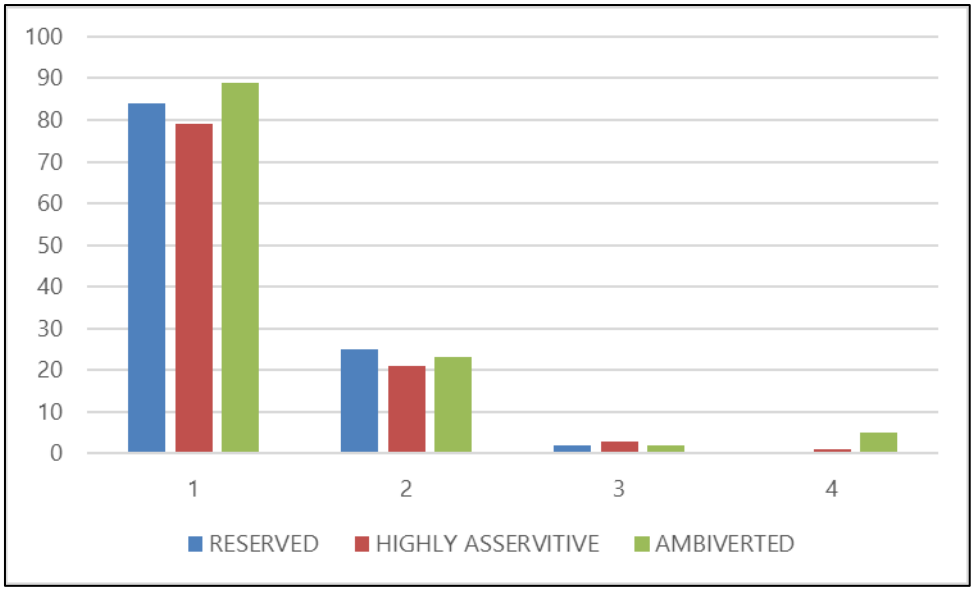

Figure 14 association of extraversion to age distribution

Table 16 Association of extraversion to gender distribution

N=520			
Extraversion	**Gender**		**Total**
	Male	**Female**	
Reserved	48	110	158
Highly Assertive	65	99	164
Ambiverted	60	138	198
Total	173	347	520

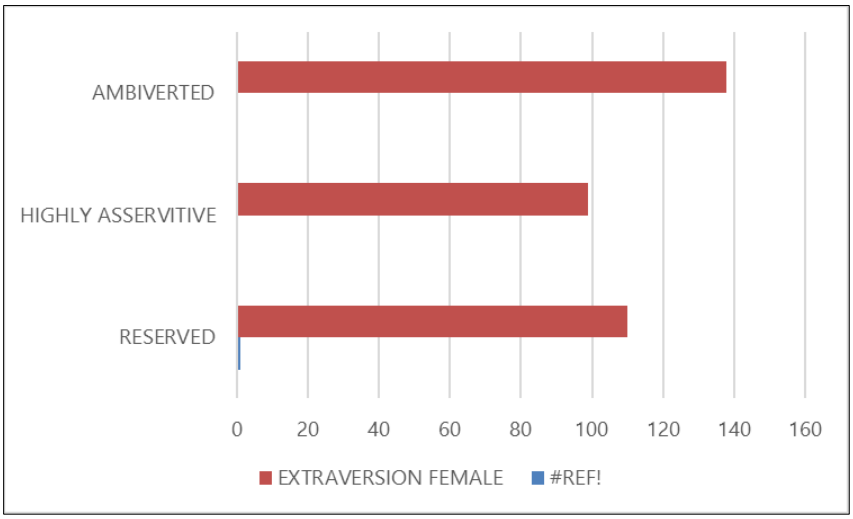

Figure 15 Association of extraversion to gender distribution

The analysis explores the relationship between extraversion and age among 520 individuals. The distribution of extraversion levels—reserved, highly assertive, and ambiverted—varies across different age groups, with the majority

of individuals falling within the 18-21 age range. However, the Chi-Square test result (p = 0.205) indicates no statistically significant association between extraversion and age.

Table 17 Association of agreeableness to age distribution

N=520						
Agreeableness	**AGE**					**Total 20-21**
	18-19	**20-21**	**22-23**	**24-25**	**26-27**	
Critical	22	10	5	1	0	38
Cooperative	119	95	37	2	4	257
Balanced	111	81	27	4	2	225
Total	252	186	69	7	6	520

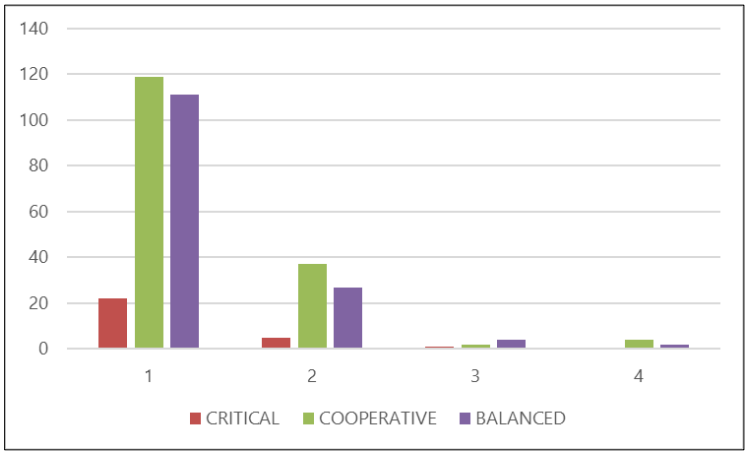

Figure 16 Association of Agreeableness to Age Distribution

The analysis examines the relationship between agreeableness and age among 520 individuals. The distribution of agreeableness levels—critical, cooperative, and balanced—varies across different age groups, with the majority of individuals being cooperative or balanced. However, the Chi-Square test result (p = 0.834) indicates no statistically significant association between agreeableness and age.

Table 18 Association of agreeableness to gender distribution

N=520			
AGREEABLENESS	**GENDER**		**TOTAL**
	MALE	**FEMALE**	
CRITICAL	16	22	38
COOPERATIVE	79	178	257
BALANCED	78	147	225
Total	173	347	520

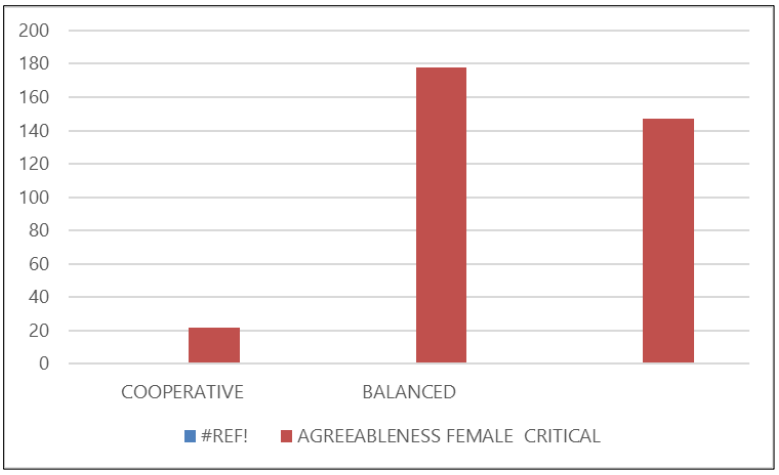

Figure 17 Association of agreeableness to gender distribution

The analysis explores the relationship between agreeableness and gender among 520 individuals. The distribution shows that both males and females are mostly cooperative or balanced, with fewer individuals classified as critical. However, the Chi-Square test result (p = 0.281) indicates no statistically significant association between agreeableness and gender.

Table 19 Association of conscientiousness to age distribution

N=520						
Conscientiousness	**AGE**					**Total 20-21**
	18-19	**20-21**	**22-23**	**24-25**	**26-27**	
Disorganized	26	23	7	3	1	60
Perfectionistic	88	54	25	1	1	169
Flexible	138	109	37	3	4	291
*Total	252	186	69	7	6	520

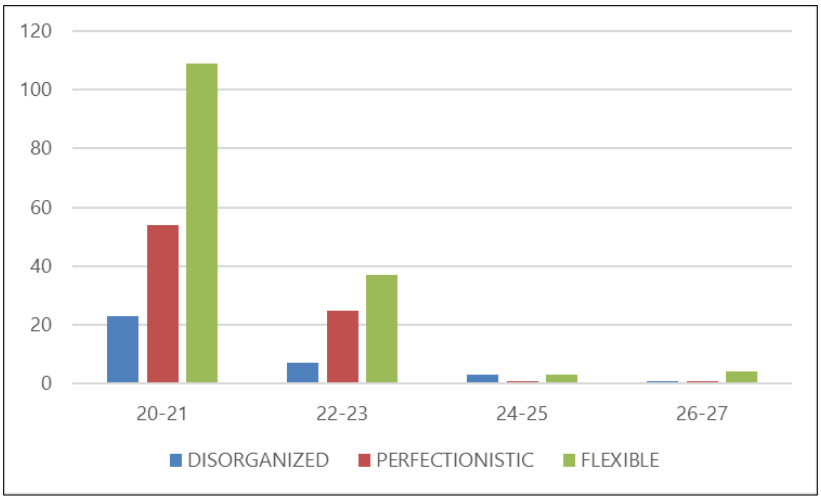

Figure 18 Association of Conscientiousness to Age Distribution

The analysis examines the relationship between conscientiousness and age among 520 individuals. The distribution of conscientiousness levels—disorganized, perfectionistic, and flexible—varies across different age groups, with most individuals being flexible or perfectionistic. However, the Chi-Square test result (p = 0.268) indicates no statistically significant association between conscientiousness and age.

Table 20 Association of conscientiousness to gender distribution

N=520			
Conscientiousness	**GENDER**		**Total**
	MALE	**FEMALE**	
Disorganized	17	43	60
Perfectionistic	53	116	169
Flexible	103	188	291
Total	173	347	520

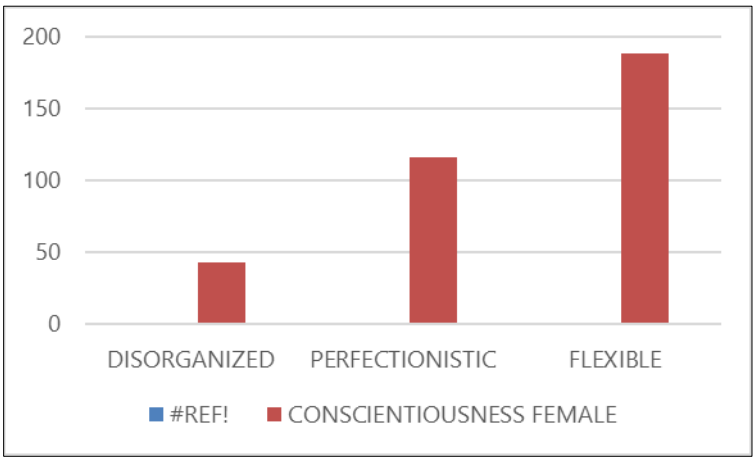

Figure 19 Association of conscientiousness to gender distribution

The analysis examines the relationship between conscientiousness and gender among 520 individuals. The distribution shows that both males and females are primarily flexible or perfectionistic, with fewer individuals classified as disorganized. However, the Chi-Square test result (p = 0.466) indicates no statistically significant association between conscientiousness and gender.

Table 21 association of neuroticism to age distribution

N=520						
Neuroticism	**Age**					**Total 20-21**
	18-19	**20-21**	**18-19**	**20-21**	**18-19**	
Emotionally stable	43	20	6	0	2	71
Anxious	87	61	29	1	2	180
Manages stress	122	105	34	6	2	269
Total	252	186	69	7	6	520

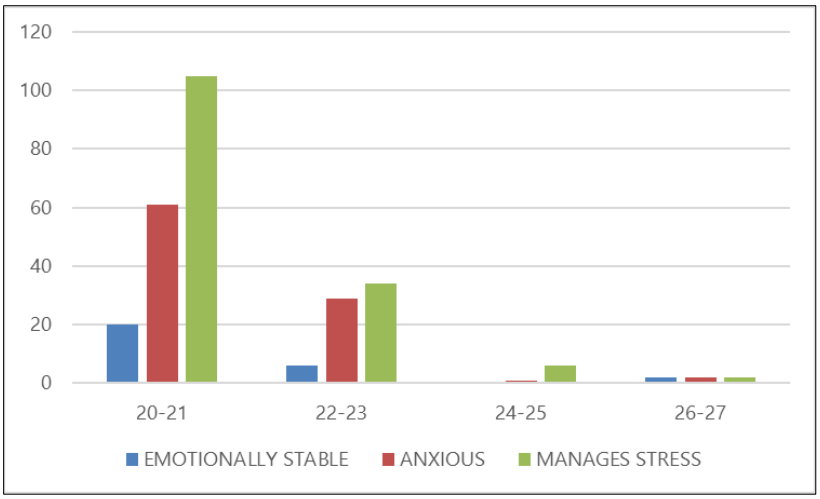

Figure 20 Association of neuroticism to age distribution

The analysis examines the relationship between neuroticism and age among 520 individuals. The distribution shows that most individuals fall into the "manages stress" category, followed by the anxious and emotionally stable groups. However, the Chi-Square test result (p = 0.123) indicates no statistically significant association between neuroticism and age

Table 22 Association of neuroticism to distribution of gender

N=520			
Neuroticism	**Gender**		**Total**
	Male	**Female**	
Emotionally stable	19	52	71
Anxious	64	116	180
Manages stress	90	179	269
Total	173	347	520

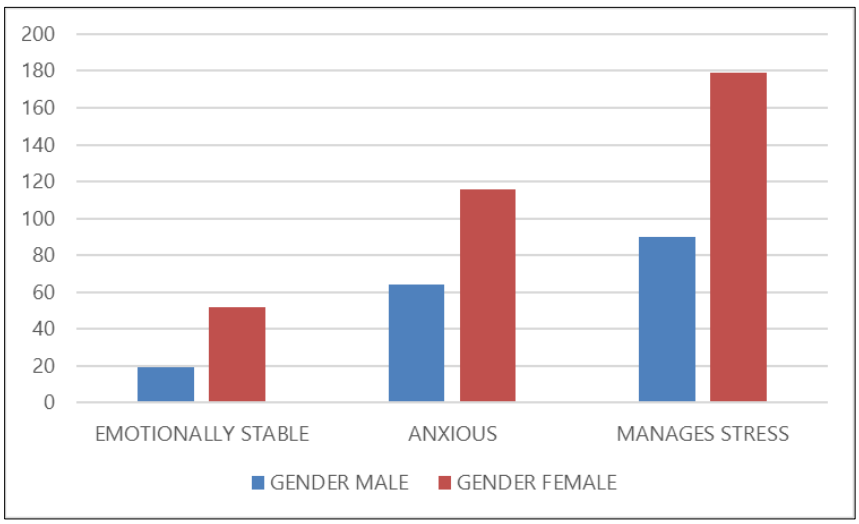

Figure 21 Association of neuroticism to distribution of gender

The analysis explores the relationship between neuroticism and gender among 520 individuals. The distribution shows that both males and females are mostly in the "manages stress" category, followed by the anxious and emotionally stable groups. However, the Chi-Square test result (p = 0.410) indicates no statistically significant association between neuroticism and gender.

Table 23 Association of openness to experience to distribution of age

N=520						
Openness to experience	**Age**					**Total**
	18-19	**20-21**	**22-23**	**24-25**	**26-27**	
Traditional	19	10	7	0	0	36
Innovative	99	58	28	2	4	191
Adaptive	134	118	34	5	2	293
Total	252	186	69	7	6	520

Chi-Square Tests			
	Value	**do**	**Asp. Sig. (2-sided)**
Pearson Chi-Square	10.161a	8	0.254
Likelihood Ratio	10.815	8	0.212
N of Valid Cases	520		

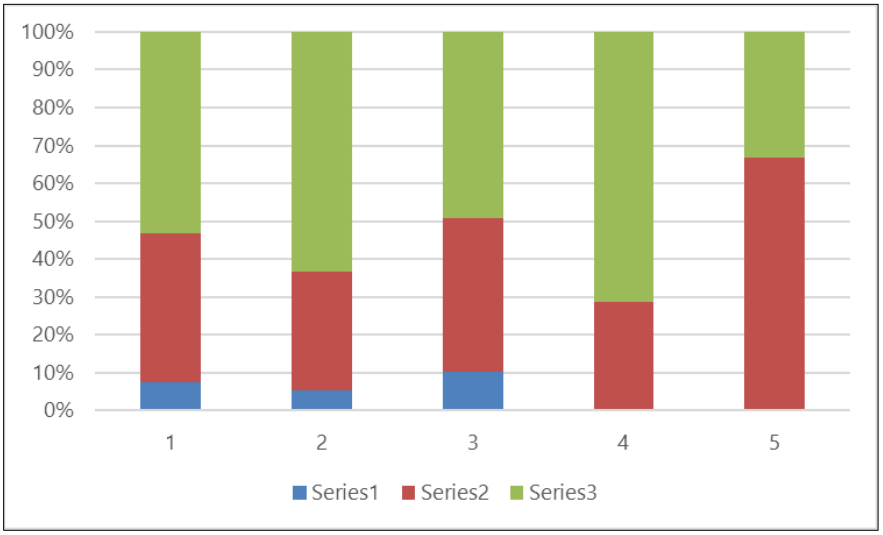

Figure 22 Association of openness to experience to distribution of age

The analysis examines the relationship between openness to experience and age among 520 individuals. The distribution shows that most individuals are categorized as adaptive, followed by innovative and traditional. However, the Chi-Square test result (p = 0.254) indicates no statistically significant association between openness to experience and age.

Table 24 Association of openness to experience to distribution of gender

N=520			
Openness to experience	**Gender**		**Total**
	Male	**Female**	
Traditional	14	22	36
Innovative	69	122	191
Adaptive	90	203	293
Total	173	347	520

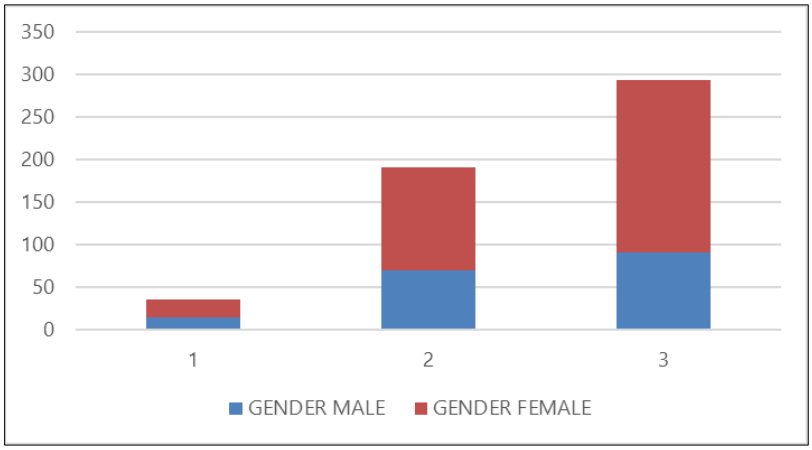

Figure 23 Association of openness to experience t distribution of gender

The analysis examines the relationship between openness to experience and gender among 520 individuals. The distribution shows that both males and females are primarily adaptive, followed by innovative, with fewer individuals classified as traditional. However, the Chi-Square test result ($p = 0.355$) indicates no statistically significant association between openness to experience and gender.

3.4. Section 4 association of Warwick Edinburgh mental wellbeing with demographic parameters

Table 25 Association of Warwick Edinburgh mental wellbeing and distribution of age

N=520						
Warwick Edinburgh mental well being	**Age**					**Total**
	18-19	**20-21**	**22-23**	**24-25**	**26-27**	
Low mental well being	134	96	29	3	3	265
Moderate well being	107	86	39	4	3	239
High mental well being	11	4	1	0	0	16
Total	252	186	69	7	6	520

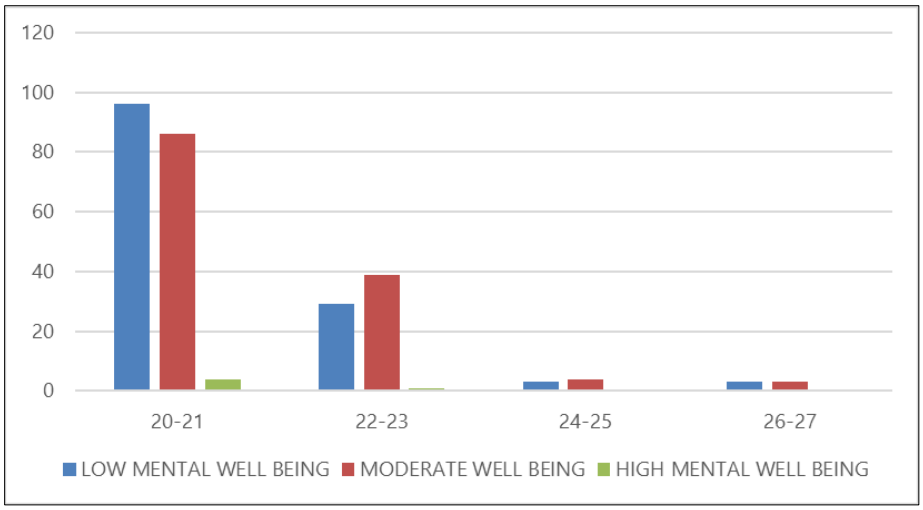

Figure 24 Association of Warwick Edinburgh mental wellbeing and distribution of age

The analysis examines the relationship between age and mental well-being among 520 individuals. The distribution shows that most individuals fall into the low or moderate mental well-being categories, with very few in the high mental well-being group. However, the Chi-Square test result ($p = 0.552$) indicates no statistically significant association between age and mental well-being.

Table 26 Association of Warwick Edinburgh mental wellbeing scale and distribution of gender

Warwick Edinburgh mental well being	Gender		Total
	Male	Female	
Low mental well being	80	185	265
Moderate well being	83	156	239
High mental well being	10	6	16
Total	173	347	520

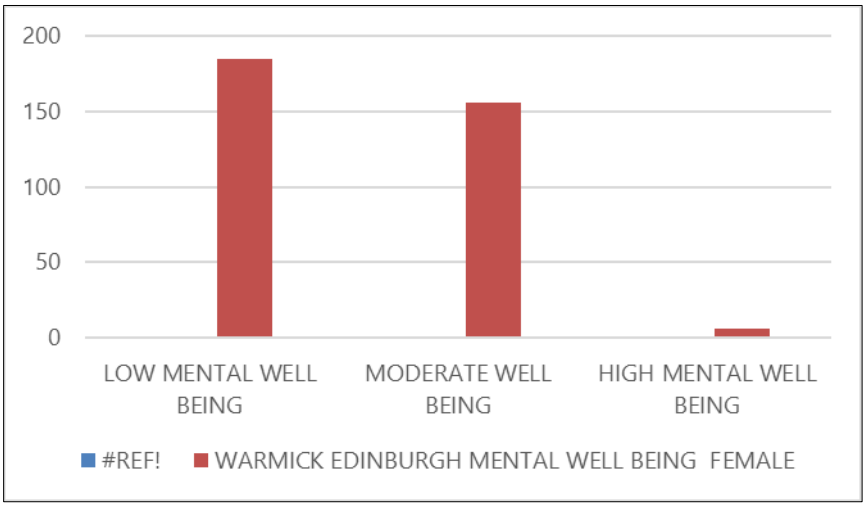

Figure 25 Association of Warwick Edinburgh mental wellbeing scale and distribution of gender

The analysis examines the relationship between gender and mental well-being among 520 individuals. The distribution shows that both males and females are primarily in the low and moderate mental well-being categories, with very few

in the high well-being group. The Chi-Square test result (p = 0.023) indicates a statistically significant association between gender and mental well-being.

4. Discussion

The results indicate that the sample predominantly comprises younger individuals, with 84.2% falling between the ages of 18 and 21 years. This concentration in younger age groups aligns with previous studies that suggest young adults, particularly those in university settings, are more likely to participate in psychological and well-being research (Arnett, 2000). The skewed distribution toward younger age groups may also be attributed to the recruitment setting, likely an academic institution, where students within this age range form the majority (Twinge et al., 2008).The sample demonstrates a gender imbalance, with females (66.7%) significantly outnumbering males (33.3%). This gender disparity is common in psychological research, as women tend to participate in studies at higher rates than men (Underwood et al., 2000). Previous research suggests that women are generally more willing to engage in surveys, particularly those related to mental well-being and personality traits (Weisberg et al., 2011).The distribution of mental well-being levels reveals that 51% of respondents experience low mental well-being, 46% fall into the moderate category, and only 3.1% report high mental well-being. These findings are concerning and are consistent with existing literature indicating that young adults face heightened mental health challenges, particularly stress, anxiety, and depression (Hunt & Eisenberg, 2010). The low proportion of individuals with high well-being may reflect academic pressures, social stressors, and transitional life changes characteristic of young adulthood (Roberts & Walton, 2022).The data on personality traits indicate a diverse distribution across extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience: Extraversion: The prevalence of ambiverted individuals (38.1%) aligns with research suggesting that many individuals exhibit both introverted and extraverted tendencies (Grant et al., 2011). The balance between reserved (30.4%) and highly assertive (31.5%) respondents suggests no overwhelming dominance of one extreme.Agreeableness: The majority (49.4%) identify as cooperative, supporting findings that agreeableness is a prevalent trait in social and academic settings (Graziano & Tobin, 2009).Conscientiousness: A significant portion (56%) is categorized as flexible, which suggests a balanced approach to responsibility and adaptability. High conscientiousness has been linked to academic and professional success (Roberts et al., 2007).Neuroticism: The distribution of neuroticism levels indicates that while a majority (51.7%) manage stress effectively, a significant proportion (34.6%) report high anxiety, consistent with studies linking neuroticism to mental health challenges (Lahey, 2009).Openness to Experience: Most respondents (56.3%) are adaptive, with a preference for flexibility and moderate openness, aligning with literature emphasizing the benefits of adaptability in contemporary environments (McCrae & Costa, 1997).The chi-square test results indicate no statistically significant associations between personality traits and mental well-being across extraversion (p = 0.196), agreeableness (p = 0.491), conscientiousness (p = 0.481), neuroticism (p = 0.564), and openness to experience (p = 0.574). This finding contrasts with prior studies suggesting that high extraversion and conscientiousness correlate with better mental well-being, while neuroticism is typically linked to poorer well-being (Steel et al., 2008). The lack of significant associations may be attributed to the relatively homogeneous age distribution or potential external factors influencing mental well-being beyond personality traits, such as environmental stressors, social support, or coping mechanisms (Keyes et al., 2010). Extraversion and Age/Gender: No significant association was found between extraversion and age (p = 0.205) or gender (p = 0.112). Previous literature suggests extraversion varies across developmental stages (Soto et al., 2011), yet the lack of significance may indicate a stable distribution within the studied age range.Agreeableness and Age/Gender: The findings show no significant association between agreeableness and age (p = 0.834) or gender (p = 0.281). Research suggests that while agreeableness increases with age (Soto et al., 2011), the narrow age range in this study may explain the non-significant results.Conscientiousness and Age/Gender: The absence of significant associations with age (p = 0.268) and gender (p = 0.466) aligns with studies indicating conscientiousness develops over time and is influenced by external responsibilities (Roberts et al., 2007).Neuroticism and Age: The non-significant relationship (p = 0.205) contrasts with literature suggesting that neuroticism typically declines with age (McCrae et al., 1999).

5. Conclusion

The findings from this study provide valuable insights into the distribution of demographic parameters, personality traits, and mental well-being among the surveyed population. The demographic analysis reveals that the majority of the respondents are young adults aged 18-21 years, with a predominance of female participants. The Warwick-Edinburgh Mental Well-Being Scale results indicate that over half of the respondents experience low mental well-being, while only a small fraction report high mental well-being. The analysis of personality traits highlights that most individuals tend to be ambiverted, cooperative, flexible, and capable of managing stress. Additionally, the majority of respondents exhibit an adaptive approach to openness to experience. These findings suggest a diverse range of personality characteristics within the study population. The examination of associations between personality traits and mental well-being does not

show statistically significant relationships, indicating that personality traits alone may not be strong predictors of mental well-being in this sample. Similarly, the analysis of associations between personality traits and demographic parameters such as age and gender also fail to yield significant correlations. These results suggest that additional factors beyond personality and demographic characteristics may contribute to variations in mental well-being.While this study provides important insights, future research could explore additional psychological, environmental, and social variables that may influence mental well-being. A larger and more diverse sample could also provide a broader understanding of these relationships. Overall, the study underscores the importance of a holistic approach to mental health assessment, considering multiple factors beyond personality traits and demographics.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare no conflicts of interest.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

[1] Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. American Psychologist, 55(5), 469-480.

[2] Graziano, W. G., & Tobin, R. M. (2009). Agreeableness and the self-regulation of behavior. Handbook of individual differences in social behavior, 535-553.

[3] Grant, A. M., Gino, F., & Hofmann, D. A. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. Academy of Management Journal, 54(3), 528-550.

[4] Hunt, J., & Eisenberg, D. (2010). Mental health problems and help-seeking behavior among college students. Journal of Adolescent Health, 46(1), 3-10.

[5] Keyes, C. L. M., Dhingra, S. S., & Simoes, E. J. (2010). Change in level of positive mental health as a predictor of future risk of mental illness. American Journal of Public Health, 100(12), 2366-2371.

[6] Lahey, B. B. (2009). Public health significance of neuroticism. American Psychologist, 64(4), 241-256.

[7] McCrae, R. R., & Costa, P. T. (1997). Conceptions and correlates of openness to experience. Handbook of personality psychology, 825-847.

[8] Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2007). Patterns of mean-level change in personality traits across the life course. Psychological Bulletin, 133(1), 1-27.

[9] Soto, C. J., John, O. P., Gosling, S. D., & Potter, J. (2011). 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, 100(2), 330-348.

[10] Twenge, J. M., Konrath, S., Foster, J. D., Campbell, W. K., & Bushman, B. J. (2008). Egos inflating over time: A cross-temporal meta-analysis of the Narcissistic Personality Inventory. Journal of Personality, 76(4), 875-902.