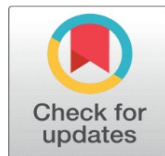


PERSONALITY FACTORS AS A MEDIATOR IN THE RELATIONSHIP BETWEEN HAPPINESS AND PSYCHOLOGICAL WELL-BEING: A PARALLEL MEDIATION MODEL

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ABSTRACT

Psychological well-being influences every aspect of an individual's behaviours, thus it's important to understand how happiness and traits affect psychological well-being. This study aimed to investigate the relationship between happiness and psychological well-being, mediated by personality factors. 260 young adults aged 17–39 were surveyed in order to administer Ryff's psychological wellbeing scale, Lyubomirsky's subjective happiness scale, and Rammstedt's Big Five personality inventory. The findings demonstrate that psychological well-being and extraversion factor have a significant effect on inhabitants and that psychological well-being has a significant relationship with happiness. Extraversion, agreeableness, and openness to experience mediated psychological well-being and happiness relationships.

Keywords: Happiness, Psychological Wellbeing, Personality

1. INTRODUCTION

According to the Happiness Index measured by the World Happiness Report, the level of happiness in India has been steadily decreasing over time (WHR). India improved its ranking from 2022's World Happiness Report, in which it ranked 136th out of 146 countries, to 2021's, in which it ranked 139th. India dropped from 140th in 2019 to 144th in 2020. Ranking at 133rd in 2018 was a drop from 2017's 122nd. India dropped from its previous ranking of 117 to 118 out of 158 countries in the 2016 study ("UN world happiness report 2022: India ranks 136th," 2022). According to UNFPA's 2022 state population projections, approximately 27% of the country's residents are under the age of 29. With 253 million, India has the largest young population in the world which is between 10 and 19 years old. (Desk, 2022).

Even if young people in today's society benefit from much advancement, they also confront many difficulties. The stresses they experience lead them to behave stubbornly. Reasons for wanting to be alone could be anything from a need for personal space to the increasing frequency with which certain problems occur, such as substance abuse, violence against women, obesity, depression, thoughts of suicide, and broken relationships. These problems could have far-reaching consequences. Recent research has also shown that social media now has a significant role in shaping adolescents' emotional well-being (Pathan & Khan, 2020). In the last 20 years, positive psychology research has emerged as a powerful tool for helping people improve themselves.

According to research conducted by Pishva, Ghalehban, Moradi, and Hoseini (2011) on the "big five" personality traits, an individual's level of extraversion predicts their level of happiness, while the opposite is true for neuroticism. Another study with the same number of participants (424 college freshmen) revealed similar outcomes (Kirkpatrick, 2015).

Positive emotions and reduced stress are hedonic benefits of psychological health, as found by Ryff and Singer (1998). Ryff and Keyes (1995) found similar results, demonstrating moderate to substantial relationships between psychological health and subjective measures of joy, contentment, and absence of depression. Thus, an improved state of mind is associated with a more positive evaluation of one's life and, ultimately, more satisfaction with one's own existence (Slemp & Vella-Brodrick, 2013). Numerous studies have discovered correlations between thankfulness and happiness, as well as between distinct personality traits and happiness levels.

Therefore, there is a need to focus on the unique and combined factors that will improve the level of happiness and psychological wellbeing among young adults.

1.1. OBJECTIVES

- To explore the relationship between Happiness, Psychological Wellbeing and personality factors.
- To investigate how personality traits mediate the link between psychological health and happiness.

Hypotheses:

H1: There would be significant relationship between happiness, psychological wellbeing and personality factors among young adults.

H2: The association between happiness and psychological wellbeing among young adults would be mediated by the personality factors.

2. PARTICIPANTS AND PROCEDURE

Participants

There were a total of 260 young adults in the study. Out of a total of 260 participants, 222 were female and 38 were male ($N = 260$). Participants' ages ranged from 17 to 19 ($M = 20.55$, $SD = 4.95$). Data was gathered from willing participants. All participants gave verbal consent, while participants were not compensated for their time, they were guaranteed that their answers would remain private and anonymous and be used only for research. The Vasantrao Naik Government Institute of Arts and Social Sciences, Nagpur, granted approval for the study before it began.

3. MEASURES

Psychological Well-being

For this purpose, we used the 18-item, 6-subscales abbreviated version of the Psychological Wellbeing Scale (Ryff & Keyes, 1995) to evaluate respondent's psychological well-being. Respondents were shown a 7-point Likert-type scale illustrating a variety of characteristics and asked to rate each one on a scale from 1 (strongly disagree) to 7 (very much agree) (strongly disagree).

Happiness

A subjective happiness scale was used to assess levels of happiness (Lyubomirsky & Lepper, 1994). This scale, also referred to as the General Happiness Scale, consists of four items designed to measure subjective happiness. On a 7-point

Likert-type scale, participants were asked to rate various characteristics from 1 (not a very happy person) to 7 (a very happy person).

Personality

For the purpose of measures of personality factors, a modified version of the Big Five Personality Inventory was employed (Ramstedt & John, 2007). The five personality factors in this test are measured (extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience). Participants rated numerous features on a 5-point Likert-type scale from 1 (strongly disagree) to 5 using the following criteria: (strongly agree).

Procedure

The researcher was able to communicate with the participants by going through the known faculty members that we had at the numerous educational institutions that are located in the city of Nagpur. The participants spoke to one another mostly in the context of smaller discussion groups. The participants were under no obligation to take part in the study, and they were allowed to withdraw from the investigation at any time if they considered the survey to be unpleasant. In order to get people's informed consent before we started the poll, we first requested people to participate in the survey who were willing to do so. After we had initially obtained their informed consent, we then proceeded to provide them with the aforementioned questionnaire in accordance with the instructions that they normally provide.

Data Analysis

Before testing the model, descriptive statistics were used to examine the properties of the observed scale, the assumptions underlying the analysis, and the connection between the research variables. This was done before testing the model. Descriptive analysis, one-way analysis of variance (ANOVA), and an independent samples t-test were used to characterise and compare the demographic data (gender, inhabitant, and stream) on the distribution of psychological well-being. The data focused on the distribution of psychological well-being. Scatterplots and Q-Q plots were created in order to test for linearity and homoscedasticity, and multiple regressions with standardized residuals was utilized in order to evaluate the normality assumption. In order to investigate the connections between the variables of this study, Spearman correlation coefficients were determined and used (the five personality factors, subjective reports of happiness, and an overall sense of psychological well-being). After establishing a baseline through descriptive statistics and correlations, we performed parallel mediation analyses (Model 4) in SPSS using the PROCESS macro version 4.0 (Rockwood & Hayes, 2020) to investigate the role that personality factors play in mediating the relationship between happiness and psychological well-being indicators. This was done in order to determine whether or not personality factors play a significant role in determining whether or not an individual is happy. At every stage of the statistical analysis process, we utilised IBM SPSS 23.0 for Windows. In order to be declared statistically significant, the two-tailed p value has to be lower than 0.05.

4. RESULTS

4.1. DESCRIPTIVE STATISTICS

Preliminary analysis found that homoscedasticity and linearity favour normality. Table 1 shows the characteristics and distribution of the participants' psychological well-being. 38 male participants (14.6%) and 222 female individuals (85.4%) provided data for our study. The study's participants had an average age of 20.55 ± 4.95 years (mean $\pm$ SD). The participants in this study had a mean psychological well-being score of 91.08 ± 9.76 . The Pearson product-moment correlation results also revealed that psychological health and extroversion, among other personality traits, were strongly and favourably related to happiness. The F/T test results are presented with descriptive statistics demonstrating correlations and connections between research variables (Table 2). Table 2 shows that extraversion, agreeableness, conscientiousness, openness to experience, and happiness are all positively correlated with psychological well-being. According to another finding, there were no significant differences in psychological wellbeing based on gender and stream. The mean comparison revealed significant differences in psychological well-being between urban and rural adolescents, as well as relationships between inhabitants and psychological well-being ($t = 3.21, p = 0.001$).

Table 1

Frequency and percentage values of sample characteristics (Gender, Inhabitant and stream; (N=260).							
Characteristics	Gender		Inhabitant		Stream		
	Male	Female	Urban	Rural	Arts	Science	Commerce
Frequency	38	222	148	112	83	89	88

% of Sample	14.60%	85.40%	56.90%	43.10%	31.90%	34.20%	33.80%
Extraversion	6.63 (2.03)	6.87 (2.18)	6.45 (2.06)	7.36 (2.19)	6.61 (2.00)	7.07 (2.25)	6.82
M (SD)							-2.21
F/t (P)	0.65		3.41		1		
p	0.516		0.001		0.369		
Agreeableness	6.13 (2.08)	6.92 (1.99)	6.76	6.87 (2.07)	7.10 (1.79)	6.79 (2.11)	6.55
M (SD)			-1.98				-2.1
F/t	2.25		0.41		1.68		
p	0.025		0.686		0.189		
Conscientiousness	6.00 (1.50)	6.73 (1.97)	6.64 (2.05)	6.61 (1.76)	6.57 (1.94)	6.57	6.74
M (SD)						-1.83	-2.03
F/t	2.19		0.144		0.22		
p	0.03		0.886		0.801		
Neuroticism	5.47 (1.96)	5.78 (2.02)	5.80 (1.96)	5.65	5.84 (1.67)	5.66 (2.05)	5.7
M (SD)				-2.09			-2.28
F/t	0.864		0.576		0.19		
p	0.388		0.565		0.83		
Openness to Experience	5.94 (2.48)	6.52 (2.11)	6.26 (2.09)	6.67 (2.26)	6.35 (2.22)	6.49 (2.36)	6.47
M (SD)							-1.93
F/t	1.52		1.5		1.06		
p	0.131		0.135		0.9		
Psychological Wellbeing	89.87 (8.44)	91.32 (9.97)	89.45 (9.66)	93.30 (9.49)	91.46 (10.27)	91.70 (10.34)	90.18
M (SD)							-8.62
F/t	0.85		3.21**		0.61		
p	0.398		0.001		0.544		
Happiness	19.53 (3.19)	20.41 (3.85)	20.03 (3.58)	20.61 (3.10)	20.13 (3.45)	20.18 (3.74)	20.51
M (SD)							-4.11
F/t	1.33		1.23		0.26		
p	0.185		0.22		0.772		
Note. Frequencies are to be considered out of total N=260 and percentages out of total=100%.							

Table 2

Associations of extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, psychological well-being, and happiness (n = 260)							
	1	2	3	4	5	6	7
1. Extraversion	1						
2. Agreeableness	.158*	1					
3. Conscientiousness	.242**	.156*	1				
4. Neuroticism	-.147*	-0.118	0.087	1			
5. Openness to Experience	.267**	.284**	.128*	0.018	1		
6. Psychological Wellbeing	.431**	.297**	.139*	0.016	.529**	1	
7. Happiness	.240**	.240**	0.065	-0.066	.355**	.472**	1

Mean	6.84	2.16	6.63	5.73	6.44	91.11	20.28
Standard Deviation	6.81	2.02	1.93	2.01	2.17	9.76	3.77
Note. ** $p \leq .01$, * $p \leq .05$							

Figure 1 illustrates the multiple regression test for linearity and homoscedasticity using standardised predictor and residual values: effects of happiness and three personality factors on psychological health.

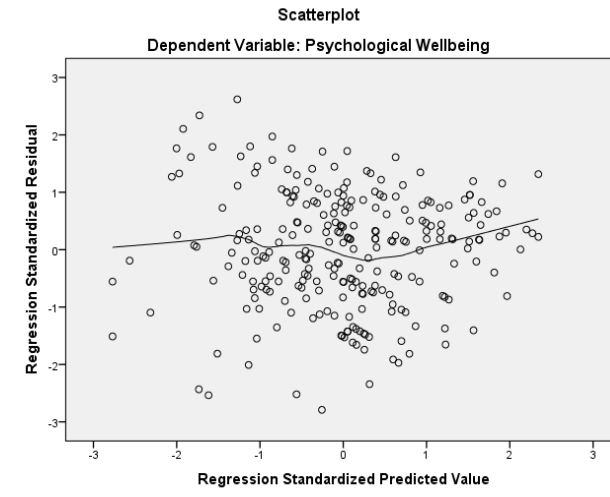
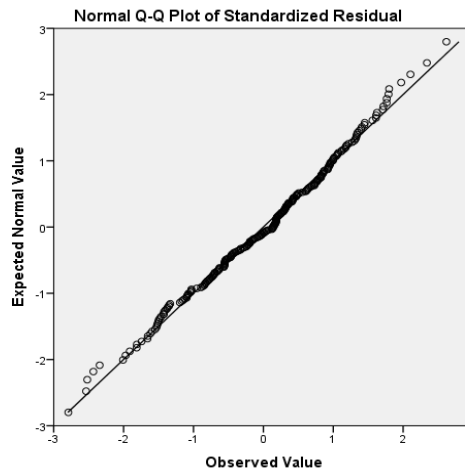


Figure 2 Checking the normality of estimation error assumption using the multiple regression standardized residuals: The influence of happiness and three personality factors on psychological wellbeing



5. MEDIATING ANALYSIS

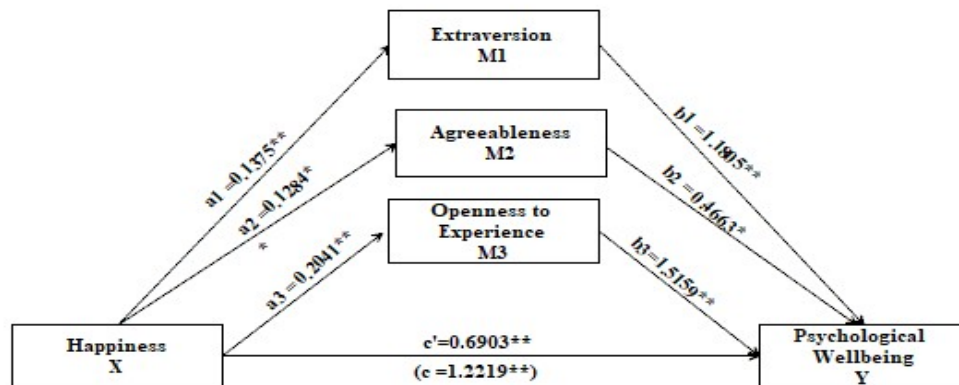
Parallel mediation analyses were conducted to search at direct and indirect relationships between happiness, psychological and well-being, personality factors (extraversion, agreeableness, and openness to experience) that mediate the relationship between happiness and psychological well-being after looking at descriptive statistics and correlation analysis. According to the findings of a parallel mediation analysis, happiness is correlated to psychological well-being indirectly through the extraversion personality factor. The psychological well-being is significantly impacted by this personality factors. As demonstrated in Figure 3, happiness is first associated with the Extraversion personality factor ($a_1 = 0.1375$, $p.001$), and subsequently with psychological well-being ($b_1 = 1.1805$, $p.000$). There have been significant predictions made. 10,000 bootstrap samples with 95% bias-corrected confidence intervals showed that the indirect effect through extraversion ($a_1b_1 = 0.1623$), holding all other mediators constant, was significantly above zero

(0.0725 to 0.2746). However, the indirect impacts through the personality subscales of agreeableness and openness to experience were equal to zero (0.0330 to 0.1305 and 0.1834 to 0.4554, respectively; see Figure 3 for effects associated with these pathways). Additionally, all three personality factors significantly influence happiness indirectly ($c' = 0.6903$, $p = .0000$).

Table 3 Parallel Mediation analysis (N=260)

Table 3 Parallel Mediation analysis (N=260)				
Model Pathways	Estimated effects	Standard error	95% Confidence Interval	
<i>Direct effects</i>			Lower bound	Upper bound
Happiness-extraversion	.1375	.0346	.0693	.2057
Happiness-agreeableness	.1284	.0323	.0647	.1921
Happiness-openness to experience	.2041	.0335	.1382	.2700
Psychological Wellbeing-extraversion	1.1805	.2220	.7434	1.6176
Psychological Wellbeing -agreeableness	.4663	.2386	-.0036	.9362
Psychological Wellbeing -openness to experience	1.5159	.2340	1.0552	1.9766
<i>Indirect effects</i>				
Happiness-extraversion- Psychological Wellbeing	.1623	.0523	.0725	.2746
Happiness-agreeableness- Psychological Wellbeing	.0599	.0330	.0032	.1305
Happiness-openness to experience- Psychological Wellbeing	.3094	.0698	.1834	.4554

Figure 3 shows how three personality traits mediate the relationship between psychological well-being and happiness. Note that all effects are unstandardized (* $p < .05$, ** $p < .01$). Personality traits have an impact on happiness; bn represents the influence of personality factors on psychological well-being; c' represents the direct effect of happiness on psychological well-being. C is total effect of happiness on psychological well-being.



6. DISCUSSION

The results revealed a significant relationship between extroversion, happiness, and psychological well-being as well as that inhabitant had a significant impact on psychological well-being. Along with agreeability, happiness, and psychological well-being, there was a strong correlation between these variables. Openness to experience, happiness, and psychological health, on the other hand, all significantly correlate with one another. There is no significant relationship between neuroticism, happiness, or psychological well-being, while the degree of conscientiousness is highly correlated with psychological well-being but not with happiness. Extraversion, agreeableness, and openness to experience are personality factors that correlate with happiness and psychological well-being and positively and significantly predict psychological well-being, according to model results. Happiness positively predicted traits of personality and psychological well-being. This study thus implies that personality plays a role in increasing psychological well-being and supports the importance of personality in understanding the relationship between happiness and psychological well-being.

The findings point to a correlation that is both positive and statistically significant between happiness and psychological well-being. It has been shown that as one's level of happiness rises, so too does one's level of psychological

well-being. This highlights the significant role that extraversion, agreeableness, and openness to experience play in one's overall psychological well-being. Understanding how one's personality might influence one's level of happiness and psychological well-being is therefore highly essential.

Consequently, prior research supports the current findings; Zach & Inglis (2019) assert that subjective well-being may be described by personality factors and their direct and indirect impacts on psychological well-being. The personalities of the individuals play a crucial influence on their psychological health, which has an impact on their academic achievement (Osamika et al., 2021, p. 805-821). Personality qualities and psychological resilience also contribute to psychological well-being, and we must focus on these particular characteristics to achieve greater psychological well-being (Sapanchi & Akkaya, 2022, p. 462-478). It also suggests that subjective well-being predicts neuroticism and extroversion personality traits, and researchers have proposed conducting a more experimental and correlational study on personality factors and well-being (Klc-Memur & Yaman, 2021, p. 216-218). Anglim et al. (2019) investigated data on various domains and aspects of the Big Five personality and psychological well-being. They highlighted the significance of neuroticism, extraversion, and conscientiousness personality factors, and they found that extraversion had a strong correlation with well-being. There is a substantial association between personality traits and mental health (Gignac & Szodoraj, 2016, p. 74-78; Steel et al., 2008, p. 138-161).

Lastly, it was discovered that extraversion, agreeableness, and openness to experience are parallel mediators of happiness and psychological well-being in personality traits. Examining the literature, only a small number of studies have investigated the mediating effect of personality variables between happiness and psychological well-being. The results of this study indicate, however, that personality traits operate as a parallel mediator between the variables of happiness and psychological well-being. In addition, there is research demonstrating that personality factors affect the relationship between happiness and psychological well-being (Sapanchi & Akkaya, 2022; Anglim et al., 2009; Gignac & Szodoraj, 2016; Steel et al., 2008). This result might be considered one of the signs that personality traits have substantial effects on an individual's happiness and psychological well-being. In addition, this demonstrates that the concept of personality should be investigated from a variety of perspectives and with consideration of a wide range of elements.

7. CONCLUSION

Psychological well-being and extraversion factors have a significant influence on the inhabitant, and psychological well-being is significantly correlated with happiness and the four personality factors. The relationship between psychological well-being and happiness was mediated by extraversion, agreeableness, and openness to experiencing personality factors.

CONFLICT OF INTERESTS

None.

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