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MODERATING ROLE OF PERSONALITY TRAITS ON STIGMATIZATION AS A PREDICTOR OF HEALTH-SEEKING BEHAVIOUR AMONG ADULTS.

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Abstract

This study investigated the moderating role of personality traits on the relationship between stigmatisation and health-seeking behaviour among adults. The sample consisted of 211 participants (114 males and 97 females) aged 18 to 65 years (M = 34.82, SD = 11.90) drawn from the General Outpatient Department of Enugu State University Teaching Hospital Parklane and University of Nigeria Teaching Hospital Ituku/Ozalla in Enugu State, Nigeria. A purposive sampling technique was employed. The study utilised three instruments: the Big Five Inventory, the Stigma Scale, and the Health-Seeking Behaviour Scale. A correlation research design was adopted, and moderated hierarchical regression analysis was used to test the hypotheses. The results revealed that stigmatisation negatively predicts health-seeking behaviour (β = -0.340, p < 0.001), indicating that higher levels of stigmatisation are associated with a lower likelihood of seeking healthcare. Contrary to expectations, the Big Five personality traits did not directly predict health-seeking behaviour. However, they moderated the relationship between stigmatisation and health-seeking behaviour, with agreeableness negatively moderating this relationship (β = -0.027, p < 0.041). Additionally, demographic variables such as age, education level, and religious affiliation significantly influenced health-seeking behaviour. These findings highlight the importance of addressing stigmatization in healthcare settings to improve health-seeking behaviour. One practical implication is the need for healthcare providers to develop targeted interventions that consider individual personality traits and demographic factors to effectively support stigmatized individuals in seeking timely medical help.

Keywords: ***Stigmatisation, Personality Traits, Health-Seeking Behaviour, Societal Attitudes, Health Care, Public Health Strategies***

Introduction

The behavioural dynamics of health-seeking are critical to addressing the gaps in healthcare access and utilisation, particularly among adults. While the necessity of seeking timely medical assistance cannot be overstated, many adults delay or avoid seeking medical help due to various perceived barriers. Among these, stigma and personality traits are pivotal factors influencing health-seeking behaviour. Stigma is the process of attributing negative labels that lead to discrimination and exclusion (Link & Phelan, 2001; Hatzenbuehler et al., 2013), which significantly impacts individuals' willingness to seek medical help. This impact of stigma is further complicated by individual differences in personality traits, as posited by the Five-Factor Model of personality (Costa & McCrae, 1985; John et al., 1991), suggesting that openness,

conscientiousness, extraversion, agreeableness, and neuroticism play a role in how individuals respond to stigma and, subsequently, in their health-seeking behaviours (Umeh, 2004; Terracciano et al., 2008).

The interplay between stigma and personality traits in influencing health-seeking behaviour underscores a complex behavioural landscape where personal and social factors converge. Previous studies have demonstrated the individual effects of stigma and personality on health behaviours (Umeh, 2004; Link & Phelan, 2001). However, the moderating role of personality traits on the relationship between stigma and health-seeking behaviour warrants further exploration. This study builds upon the foundational work by Link and Phelan (2001) on conceptualising stigma and the personality framework by Costa and McCrae (1985) to investigate how personality traits might buffer or exacerbate the effects of stigma on health-seeking behaviours.

Furthermore, the relevance of this research is highlighted by the ongoing efforts to improve healthcare access and the quality of healthcare delivery. Understanding how stigma and personality traits influence health-seeking behaviours can inform targeted interventions and public health strategies designed to mitigate the barriers to healthcare access. This study aims to contribute to the broader discourse on health psychology and behavioural medicine by providing empirical insights into how stigma and personality traits influence health-seeking behaviour among adults.

By situating this investigation within the theoretical frameworks of the Five-Factor Model of personality and stigma theories, this research seeks to illuminate the complex ways in which personality traits modulate the impact of stigma on health-seeking behaviour, offering implications for healthcare practice, policy development, and the design of public health interventions aimed at enhancing healthcare utilisation among diverse adult populations.

Review of Related Literature

The Interplay of Stigmatization, Personality Traits, and Health-Seeking Behaviour

Understanding the dynamics of health-seeking behaviour in the context of stigmatisation requires an integration of various theoretical perspectives. Theories of personality traits, stigmatisation, and health-seeking behaviour provide a multidimensional framework to explore how individual personality differences can influence the impact of stigmatisation on health-seeking behaviours.

Theoretical Background

Personality Traits: The Five-Factor Model of Personality (Costa & McCrae, 1985) posits five broad dimensions of personality—openness, conscientiousness, extraversion, agreeableness, and neuroticism—that influence individual behaviour and interaction with the environment. This model offers a lens to understand how stable personality characteristics can moderate the relationship between stigmatisation and health-seeking behaviour. Drawing from Social Identity Theory (Tajfel & Turner, 1978) and Attribution Theory (Heider, 1958), stigmatization is conceptualized as a process where individuals are negatively labelled based on certain attributes, leading to discrimination and social exclusion. These theories suggest that stigmatisation affects social identity and influences how individuals attribute causes to their experiences, potentially impacting their health-seeking behaviours.

The Theory of Planned Behaviour (Ajzen, 1991) and the Penchansky and Thomas Model of Access to Health Care (1981) provide a foundation for understanding health-seeking behaviour as a function of attitudes, subjective norms, perceived behavioural control, and accessibility. These models emphasise the role of individual intentions and the accessibility of healthcare services in shaping health-seeking actions.

Stigmatisation and health-seeking behaviour.

The relationship between stigmatisation and health-seeking behaviour is well-documented in the literature. For example, Hatzenbuehler et al. (2013) discuss how stigmatisation acts as a barrier to seeking healthcare by inducing feelings of shame and fear of discrimination, which can deter individuals from accessing necessary health services. Furthermore, the Theory of Planned Behaviour (Ajzen, 1991) suggests that attitudes towards health-seeking, influenced by stigmatisation, can significantly predict whether individuals will engage in health-seeking behaviours. This hypothesis is grounded in the understanding that

stigmatisation negatively impacts individuals' willingness to seek healthcare due to the anticipation of negative judgments.
H1: Stigmatization will significantly predict health-seeking behaviour among adults.

Personality traits and health-seeking behaviour.
The Five-Factor Model of Personality (Costa & McCrae, 1985) provides a basis for understanding how broad personality traits influence a wide range of behaviours, including health-seeking behaviour. Research by Roberts and Davis (2018) and others has shown that certain personality traits, such as conscientiousness and openness, are associated with more proactive health behaviours. Conscientious individuals tend to engage in regular health screenings and follow medical advice diligently, while openness to experience is linked to a willingness to explore various health interventions.

H2: Personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) will significantly predict health-seeking behaviour among adults.

The moderating role of Personality traits in the relationship between stigmatisation and health-seeking behaviour among adults.
The moderating role of personality traits on the impact of stigmatisation on health-seeking behaviour is an emerging area of research. Smith et al. (2017) and Johnson and Smith (2019) provide empirical evidence that personality traits such as extraversion and openness to experience can buffer the negative effects of stigmatisation on health-seeking intentions and behaviours. These findings are supported by Social-Cognitive Theory (Bandura, 1986), which posits that personal factors, including personality traits, interact with environmental factors like stigmatisation to influence behaviour. This hypothesis suggests that individuals with specific personality profiles may be more resilient to the deterring effects of stigmatisation on seeking healthcare.

H3: Personality traits will significantly moderate stigmatisation as a predictor of health-seeking behaviour among adults.

Method

Participants

This study involved 211 participants, comprising 114 males and 97 females aged between 18 and 65 years (M = 34.82, SD = 11.90), sampled from the General Outpatient Department (GOPD) of the Enugu State University Teaching Hospital Parklane and the University of Nigeria Teaching Hospital ItukuOzalla, both located in Enugu State, Nigeria. Participants were selected through purposive sampling, focusing on adults presenting for the first time to the hospital with illnesses lasting three days or more. This study excluded children, dependent adults over 65, and those with less than three days of sickness.

Instruments

The research employed three primary instruments:
Big Five Inventory (BFI) (John et al., 1991): A 44-item questionnaire measuring the Big Five personality traits. Items were rated on a scale from "strongly disagree" to "strongly agree." The BFI's reliability and validity were previously established for American and Nigerian populations (Umeh, 2004).
Stigma Scale (Link et al., 2001): A 15-item scale assessing perceived stigmatisation, with responses ranging from "never" to "every day." This scale has demonstrated reliability and validity in various contexts, showing good psychometric properties.
Health-Seeking Behaviour Scale (Walker et al., 2009): Developed to measure individuals' actions and decisions regarding utilising healthcare services, this scale consists of 10 items rated on a Likert-type scale. Higher scores indicate more positive health-seeking behaviour, with a reported Cronbach's alpha of .78.

Procedure

Participants were approached in the hospital waiting areas after obtaining ethical approval and an introductory letter from the Department of Psychology at the Enugu State University of Science and Technology Agbani. The questionnaires were administered individually before the participants consulted with healthcare providers, ensuring confidentiality and informed consent.

Design and Statistical Analysis

The study used a correlational research design to explore the relationships between personality traits, stigmatisation, and health-seeking behaviour. Moderated hierarchical regression analysis was utilised to examine the moderating effect of personality traits on the relationship between stigmatisation and health-seeking behaviour. This statistical approach was chosen to discern the interaction effects, providing insights into how different levels of personality traits influence the primary relationship under investigation.

CHAPTER FOUR

Results

Result:

Table 1: Descriptive and Correlation Matrix of constructs

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Health Seeking Behaviour (1)	29.98	11.26	1														
Stigmatisation (2)	42.07	14.40	-.206*	1													
Big Five (3)	124.82	30.67	-.017	-.050*	1												
Openness (4)	28.54	8.24	-.003	.025	.883*	1											
Conscientiousness (5)	25.74	8.07	-.010	.017	.857*	.823*	1										
Extraversion (6)	23.05	7.01	.034	-.036	.713*	.664*	.516*	1									
Agreeableness (7)	22.81	6.91	-.048	.018	.777*	.676*	.661*	.512*	1								
Neuroticism (8)	26.00	6.10	-.013	.026	.647*	.545*	.479*	.563*	.466*	1							
Marital Status (9)	1.57	.71	.065	-.005	.063	.074	.022	.009	.039	.355	1						
Educational Level (10)	1.46	.50	-.145**	.102	.056	.074	.042	.129**	.034	.147	.072	1					
Gender (11)	1.46	.50	-.220*	.159**	.238*	.201**	.257*	.110	.194**	.043**	-.250*	-.126**	1				
Duration of Sickness (12)	1.67	.47	-.095	.210*	.097	.145**	.138**	.046	.039	.158	.016	-.239*	.429*	1			
Religious Affiliation (13)	1.90	.88	.105	.092	.191**	.197**	.230*	.122**	.207*	.057	.387*	-.216*	-.107	.054	1		
Occupation (14)	1.86	.77	.119**	-.142**	-.131**	-.132**	-.140**	-.123**	-.076	-.061	-.221*	-.391*	-.070	.083	-.218*	1	
Age mean (15)	34.82	11.90	.604*	.038	-.039	.020	.009	-.040	-.032	-.101	.357*	.196**	-.346*	-.138**	.350*	-.102	1

Correlation is significant at *P<.001; **P<.05

Note: N= 211, Age range =18-65, coded as 1 (young age, 18-39 years) and 2 (old age, 40-65 years). Gender was coded as 1 (male) versus 2 (female). Educational level 1 (low, WAEC) and 2 (high, Above WAEC). Duration of sickness 1 (Early, 1 week) and 2 (late, above 1 week). Religions affiliation 1 (orthodox), 2 (Pentecostal), and 3 (others). Occupation 1 (civil public servants), 2 (artisans), and 3 (students). Marital status: 1 (married), 2 (single) and 3 (widow, etc).

Table 1 demonstrates the correlation matrix. The table revealed that Health-seeking behaviour and stigmatization had a negative correlation r (211) = - .206, p<.001. This implies that less stigmatized participants seek healthcare services when they perceive a need for medical care or prevention. Big five personality traits had no relationship with Health-seeking behaviour r(211) = -.017, p> .05 Educational level had a negative relationship with health-seeking behaviour r (211) = - .145, p<.018. This means that Adults with lower education seek health more than those with a higher education.

The table also revealed that gender yielded a negative correlation with health-seeking behaviour r (211) = - .220, p< .001. This indicates that male adults seek more health when sick than female adults. Occupation positively correlated with health-seeking behaviour r (211) = .119, p<.043. Students seek health more than artisans and civil servants. Health-seeking behaviour positively correlated with Age r (211) =. 604, p=.001. This means that older people seek health more than younger adults. Gender had a positive correlation with stigmatization r (211) =. 159, p<.011. This indicates that female participants were more stigmatized.

Table 2: A table summarising moderated hierarchical multiple regression coefficients, model summary and ANOVA on the moderating role of personality traits in stigmatization as a predictor of health-seeking behaviour.

Model	**Variables**	**Beta**	**T**	**Sig.**	**R**	**R^2**	**ΔR^2**	**df**	**F-Change**	**Sig.**
Step 1	Stigmatisation	-.340	-3.299	.001	.248	.062	.062	3/ 207	4.525	.004
	Big Five	-.084	-1.892	.060						
	Stigmatization_ Big Five	.002	2.003	.046						
Step 2	Openness	.181	.853	.395	.283	.080	.018	5/ 202	.806	.547
	Conscientiousness	.123	.607	.544						
	Extraversion	.255	1.493	.137						
	Agreeableness	.044	-.251	.802						
	Neuroticism	.042	.247	.805						
Step 3	Stigmatization_ Openness	-.006	-.439	.661	.335	.112	.032	5/ 197	1.437	.213
	Stigmatization_ Conscientiousness	.001	.082	.935						
	Stigmatization_ Extraversion	.019	1.491	.138						
	Stigmatization_ Agreeableness	-.027	-2.054	.041						
	Stigmatization_	.010	.952	.342						

	Neuroticism									
Step 4	Marital status	-1.472	-1.577	.117	.757	.573	.461	7/ 190	29.34 3	.000
	Educational Level	-7.349	-5.240	.000						
	Gender	-.113	-.082	.934						
	Duration of Sickness	-.096	-.070	.944						
	Religious Affiliation	-2.594	-2.980	.003						
	Occupation	.110	.128	.899						
	Age	.742	13.286	.000						

a. Dependent Variable: Health Seeking Behaviour

In step one of table 2 above, stigmatization negatively predicted health-seeking behaviour β = -.340, t(-3.299), P=.001.This indicates that those who experience less stigmatization will likely seek health care, while those who experience high stigmatization will not likely seek health care. Thus, the first hypothesis, which stated that stigmatization will significantly predict health-seeking behaviour, was accepted.

The table above, again in step 1, further revealed that the moderator variable, the big five personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism), did not predict health-seeking behaviour β = -.084, t = -1.892), P>.05. This implies that the participants' personality traits do not indicate their ability to seek for health when necessary. Hence, the second hypothesis, which stated that "big five personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) will significantly predict health-seeking behaviour," is hereby rejected.

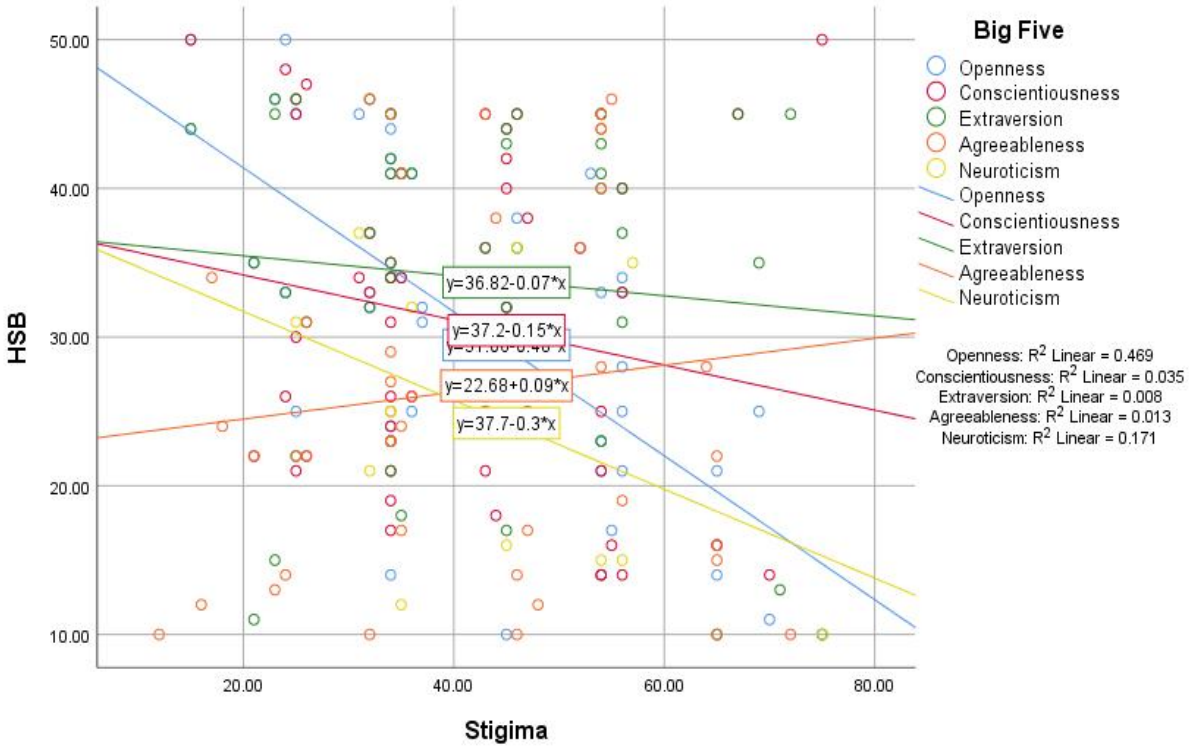
However, the table still in step 1 revealed that the big five personality (openness, conscientiousness, extraversion, agreeableness and neuroticism) traits significantly and positively moderated the negative relationship found between stigmatization and health-seeking behaviour (β = .002, t = 2.003, P=.046). This means that participants who have high personality traits, though they are stigmatized, will likely seek health when sick. Hence, the third hypothesis, which said that "personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) will moderate the relationship between stigmatization and health-seeking behaviour", is hereby accepted. Refer to the moderation graph in Figure 2 below for more explanations. The relationship between variables entered in step one yielded (R=.248) and accounted for approximately 6.2% (ΔR2 =.062) of the variance in health-seeking behaviour scores which contributed significantly to the regression model, F-change (3,207) =4.525, p=.004.

Further, five dimensions of personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) were entered in step two, thus none of the dimensions significantly predicted health-seeking behaviour (Openness, β = .181, t = .853, P>.05; Conscientiousness, β = .123, t = .607, P>.05; Extraversion, β = .255, t = 1 .493, P>.05; Agreeableness, β = -.044, t = -.251, P>.05; Neuroticism, β = .042, t = .247, P>.05). The relationship between variables entered in step two yielded (R=.283) and accounted approximately 8.0% (ΔR^2 =.018) of the variance in health-seeking behaviour scores which failed to contribute significantly to the regression model, F-change (5,202) =.806, p>.05.

In step three of Table 2 above, the moderation of analysis of all the five dimensions of the big five personality traits and stigmatization in health-seeking behaviour was performed. Thus, only agreeableness negatively moderated the negative relationship between stigmatization and health-seeking behaviour (β = -.027, t = -2.054, P=.041); whereas, openness (β = -.006, t = -.439, P>.05) conscientiousness (β = .001, t = .082, P>.05) extraversion (β = .019, t =1.491, P>.05) and neuroticism (β = .010, t = .952, P>.05) failed to moderate the negative relationship found between stigmatization and health-seeking behaviour.

Hence, the third hypothesis, which stated that personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) will jointly and independently moderate the relationship between stigmatization and health-seeking behaviour, is hereby partially accepted. Since agreeableness moderated stigmatization in health-seeking behaviour, it implies that those who are agreeable (that is, putting others' needs/health before their own) are likely not going to seek health when stigmatized. While those low on agreeableness are mostly likely to seek health even when stigmatized (see Figure 3 below for the moderation graph). The relationship between variables entered in step three yielded (R=.335) and accounted for approximately 11.2% (ΔR^2 =.032) of the variance in health-seeking behaviour scores, which did not contribute significantly to the regression model, F-change (5, 197) =1.437, p>.05.

Advancing to step four, the seven demographic variables controlled in this study were entered, however, educational level and religious affiliation yielded a significant negative outcome, while age yielded a significant positive outcome in health-seeking behaviour (Educational level, β = -7.349, t = -5.240, P=.001; Religious Affiliation, β = -2.504, t = -2.980, P=.003; Age, β = .742, t = 13.286, P=.001). Whereas, Marital Status, Gender, Duration of sickness and occupation yielded none remarkable outcomes (β = -1.472, t = -1.577, P>.05; β = -.113, t = -.082, P>.05; β = -.096, t = -.070, P>.05; β = .110, t = .128, P>.05) respectively. The relationship between variables entered in step four yielded (R=.757) and accounted for approximately 57.3% (ΔR^2 =.461) of the variance in health-seeking behaviour scores, which contributed significantly to the regression model, F-change (7, 190) =29.770, p=.001.



Note: Health Seeking Behaviour (HSB), Stigmatization (Stigma)

Figure 2: This figure shows the joint interaction of stigmatization and the Big Five personality traits (openness, conscientiousness, extraversion, agreeableness, and neuroticism) in health-seeking behaviour. However, observation of the figures revealed that among the five dimensions of the big five personality traits, only agreeableness indicates that high agreeable adults who are stigmatized will likely not seek for health.

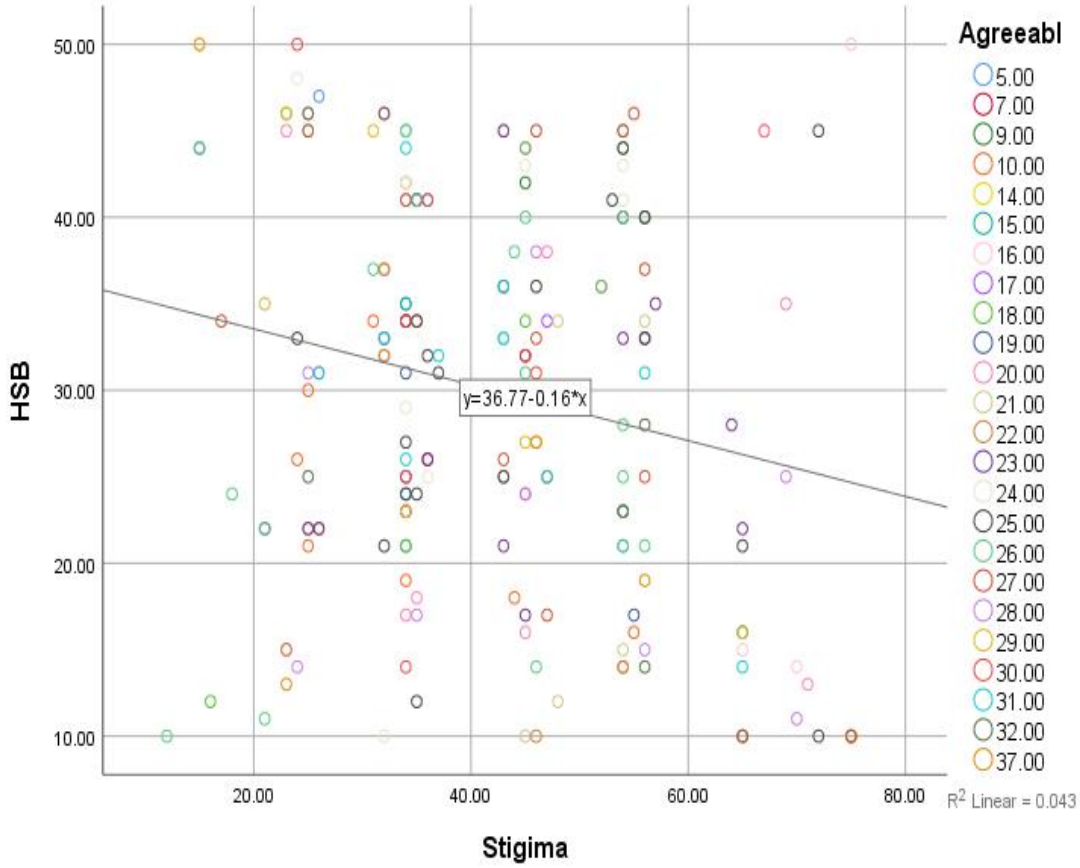


Figure 3: This graph illustrated the negative moderation of agreeableness a dimension of big five personality traits in the negative relationship between stigmatization and health-seeking behaviour. Thus, observation of the graph revealed that adults who are less agreeable though stigmatized will likely seek for health.

Summary of Results

1. Stigmatization negatively predicted health-seeking behaviour.
2. Big Five personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) did not predict health-seeking behaviour.
3. Big Five personality traits (openness, conscientiousness, extraversion, agreeableness and neuroticism) jointly and positively moderated the negative relationship between stigmatization and health-seeking behaviour. However, only agreeableness negatively and independently moderated stigmatization in health seeking behaviour.
4. Age, Education level and Religious Affiliation out of the seven demographic variables controlled in the study yielded significant outcomes in health-seeking behaviour.

Discussion

The significant predictive role of stigmatisation on health-seeking behaviour aligns with Goffman's theory of social stigma, which suggests that the fear of discrimination can profoundly affect individuals' actions and self-concept (Goffman, 1963). However, the positive correlation found in this study indicates a complex relationship where stigmatisation may also motivate individuals to seek healthcare to address or confirm health concerns, echoing findings from Steward et al. (2008), who noted that stigma could lead to increased healthcare utilisation under certain conditions.

The moderating effect of agreeableness on the relationship between stigmatisation and health-seeking behaviour suggests that individuals with high agreeableness are more likely to perceive healthcare environments as supportive rather than judgmental, which is consistent with the findings of Smith and Christakis (2008) that highlights the role of social networks and trust in healthcare professionals in facilitating health service utilisation.

Openness to experience's predictive power over health-seeking behaviour underscores the importance of novelty and willingness to engage with unknown situations, including navigating the healthcare system. This finding is supported by Deary, Weiss, and Batty (2010), who demonstrated that openness influences health behaviours through a propensity for information-seeking and adherence to medical advice.

Implications for Practice and Policy

Understanding that personality traits such as agreeableness significantly influence health-seeking behaviour suggests a need for healthcare providers to tailor their communication and engagement strategies to individual patient profiles, an approach supported by the patient-centred care model advocated by Epstein and Street (2011).

Interventions designed to educate the public and healthcare providers about the detrimental effects of stigma on health-seeking behaviours are crucial to address stigmatisation's impact. Corrigan and Watson (2002) emphasise the importance of destigmatisation campaigns in improving mental health outcomes, which could be extended to other stigmatised conditions.

Limitations and Future Research

Acknowledging the limitations of self-report measures, as noted by Podsakoff, MacKenzie, Lee, and Podsakoff (2003), future studies could incorporate objective health outcomes to validate self-reported health-seeking behaviour, enhancing the reliability of findings.

Conclusion

In sum, this study adds to the literature by elucidating the complex roles of stigmatisation and personality traits in health-seeking behaviour, offering insights critical for developing more inclusive and supportive healthcare environments.

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