

# Personality Characteristics as Predictor of Preventive Health Behaviour

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**Abstract**— This study investigated personality characteristics as predictor of preventive health behaviour. Two hundred research participants were used in the course of this study. Two instruments were used which include Big five inventory developed by John(1991) which aim to assess personality characteristics and preventive health behaviour scale developed by Karls and Cobb (1995) to measure individual perceived health behaviour. Six hypotheses were tested in the study using regression analysis and Analysis of Variance statistical test. The first hypothesis states that agreeableness will predict preventive health behaviour and it was observed from the study that agreeableness predicts preventive health behaviour. Hypothesis two states that conscientiousness will predict preventive health behaviour and it was observed from the study that conscientiousness does not predict preventive health behaviour. Hypothesis three states that extraversion will predict preventive health behaviour and it was observed from the study that extraversion does not predict preventive health behaviour. Hypothesis four reported that openness to experience will predict preventive health behaviour and it was observed from the study that openness to experience predicts preventive health behaviour. Hypothesis five states that neuroticism will predict preventive health behaviour and the result of the study revealed that neuroticism does not predict preventive health behaviour. Hypothesis six states that age will influence preventive health behaviour and it was reported that age does not have a significant influence on preventive health behaviour ( $F(2, 195) = .294, p > .05$ ). Findings are discussed according to literatures, relevant conclusions were drawn and it was recommended that government should formulate policy that will enhance preventive health behaviour among individuals and organisation.

**Index Terms**— Preventive health Behaviour, Personality.

## I. INTRODUCTION

Preventive health behaviour has been a subject of research of recent times. Researchers began to delve in to understand factors that may trigger individual volition to engage in preventive health. Recent literatures has explored link of various personality dimensions to preventive health behaviour and thus provide certain explanation in understanding the linked up between personality and preventive health behaviour. Therefore, one may ask question whether or not if differences in personality trait could predict preventive health behaviour or does individual who observed preventive health may be linked up to certain personality disorder like OCB?. Nonetheless, People may engage in

preventive health behaviors not only for health reasons. They may develop such behaviors according to their desires (Reach, 2003), in order to respond to other motivations such as ego-related or socially oriented ones (Linan& Bowling 2007). The influence of motivations not directly linked to health in the decision to engage in preventive health behaviors is a subject that requires further research. Moreover, it will be an awesome interest to delve into dimension of personality and possible unravel the dimensions of personality an individual could have that is/are capable of predicting preventive health behaviour.

## II. PURPOSE OF THE STUDY

The purpose of this study is to evaluate whether personality could predict preventive health behaviour. Others purposes of the study include specifically to:

- investigate whether conscientiousness will predict preventive health behaviour
- find out whether agreeableness will predict preventive health behaviour
- examine while other personality dimensions will predict preventive health behaviour
- determine whether sex differences could influence preventive health behaviour

### Scope of the Study

This study will be carried out in the purview of Ekiti State University Nigeria using Non-academic staffs as research participants. 150 non-academic staffs will be randomly picked for this research

### Significance of the Study

The study will educate the general public on preventive health related behaviour and received social support; likewise this study will shed light on the components personality traits. Findings of this result will address the issues why some engage in preventive health related behaviour and also contribute to body of knowledge. This study will address whether men or women engage ore in preventive health behaviour and findings will be added to literature. The findings of this study will be relevant to Government organizations such as ministries, federal and state secondary schools and non-governmental organization (NGO'S) in the sense that it will help to organize seminars to educate both parents and caregivers, and professionals on the role of personality in predicting preventive health related behaviour.

## III. HYPOTHESES

- Agreeableness will significantly predict preventive health behaviour
- Conscientiousness will significantly predict

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- preventive health behaviour
- Extraversion will significantly predict preventive health behaviour
  - Openness to experience will significantly predict preventive health behaviour
  - Neuroticism will significantly predict preventive health behaviour
  - Age will significantly influence preventive health behaviour

**Operational Definition of terms**

In this study, the following concepts are operationally defined as;

**Preventive health behaviours:** This is defined as “any activity undertaken by a person who believes himself to be healthy for the purpose of preventing disease... in an asymptomatic stage” according to Health behaviour scale developed by (Kasl and Cobb 1966)

**Personality traits:** This is defined as descriptions of people in terms of relatively stable patterns of behavior, thoughts, and emotions according to Big five personality inventory developed by (McCrae & Costa, 2003).

IV. METHOD

**Research Design:** This research is a survey research design adopting ex-post-facto study where copies of questionnaires were distributed to research participants in order to measure their response.

**Participants:** Participants of this study includes undergraduates of Ekiti State University.

**Sampling Method and Techniques:** The population of this study is Ekiti state university whereby a carefully selected of 200 participants (undergraduates) were considered. Convenience sampling method techniques were adopted in selecting research participants.

**Variables:** The variables of this study include an independent variables (Personality) and dependent variables (Preventive health Behaviour).

V. RESEARCH INSTRUMENT

BIG FIVE INVENTORY

The big five inventory, is a 44 item inventory which assess personality from a five dimensional perspective. The essence of the perspective is that personality characteristics can be resolved into five broad dimensions which are distinct from one another .The five dimension or subscales are A extraversion B agreeableness C conscientiousness D neuroticism E openness to experience.

DEVELOPER

John(1991) provided the original psychometric properties for American samples while, Umeh (2004) provided for Nigerian samples.

Norm

The norms reported here are the mean scores of samples drawn from a population of university students.

Scale American (Male and Female) =711 Nigerian (male 60) and (female60)=120

<b>Extraversion</b>	<b>25.60</b>	<b>28.45</b>	<b>27.10</b>
Agreeableness	34.20	29.75	28.73
Conscientiousness	32.40	29.10	29.60
Neuroticism	24.00	23.43	24.48
Openness to experience	35.00	38.07	35.18

Reliability

The co-efficient of reliability provided by John et al (1991)are

Type	Co-efficient
Cronbach alpha	80
3 month test –re-test	85

VALIDITY

The big five inventory has main convergent validity co-efficient of .75 and .85,with the big five instrument authored by Costa and Macrae (1992).The divergent validity co-efficient obtained by Umeh(2004) with the university maladjustment scale(Kleinmuntz,1961) are extraversion(.05),agreeableness(.13),conscientiousness(.11),neuroticism(.39),openness to experience(.24).

INTERPRETATION

The Nigerian norms or mean scores are the basis for interpreting scores of the clients. Scores equal to, higher than the norms indicate that the clients manifest the specific personality type, while the scores lower indicate the client, does not manifest some specific personality type.

**Preventive Health Behaviour Scale**

This scale was developed by Kals&Coobs (1995), the questionnaire tends to measure individual health behaviour. The scale reported a consistency reliability of .76, interrater reliability .78. Also, the scale reported a validity of .87 and Cronbach alpha reliability of .86. Moreover, the questions are directly scored in a way that SD=1 to SA= 5)

**Procedure for Data collection:** Copies of questionnaires were distributed to the research participants within the sample of the selected population and each measure are scores respectively following the direction of the measures of the scale used.

**Data Analysis**

Regression analysis was used to test hypotheses 1 to 5 while One way ANOVA was used in testing hypothesis 6.

VI. RESULT

Table 4.1: Regression summary table showing the influence of agreeableness, conscientiousness, openness to experience, neuroticism and extraversion on preventive health behaviour

Personality	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R	R <sup>2</sup>	F	P
	B	Std. Error	Beta						
Extraversion	.010	.046	.016	.224	>.05	.019	.014	.552	>.05
Openness to Experience	-.111	.094	-.086	-1.187	<.05				
Neuroticism	.025	.069	.026	.363	>.05				
Agreeableness	.082	.095	.063	1.863	<.05				
Conscientiousness	.051	.057	.065	.888	>.05				

Table 4.1 revealed that agreeableness has a significant influence on preventive health behaviour (t = 1.863 p<.05). Also, it was revealed from the table that extraversion does not have a significant influence on preventive health behaviour (t= .224 p>.05). Openness to experience has a significant influence on preventive health behaviour (t = -1.187 p<.05) and it was revealed from the table that neuroticism does not influence preventive health behaviour (t= .363 p<.05)

Table 4.2: One way ANOVA summary table showing the influence of age on preventive health behaviour

**ANOVA**

Preventive health behaviour

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.689	2	.344	.294	>.05
Within Groups	228.200	195	1.170		
Total	228.889	197			

Table 4.2 revealed that age does not have a significant influence on preventive health behaviour (F(2 195) = .294 p >.05)

VII. DISCUSSION

Hypothesis one states that personality characteristics will have a significant influence on preventive health behaviour and it was revealed from the table that agreeableness influence preventive health behaviour. This result supported the work of McCrae(1992) who argued that agreeableness is a composite of several lower-order traits related to maintaining interpersonal harmony: trust, honesty, compliance, interpersonal deference, and altruism, with a preference for cooperation .People on the low end of this dimension may be egocentric, competitive, and skeptical about other people’s intentions. Thus, those scoring high on agreeableness are likely to have a trusting and compliant nature, which may be associated with lower skepticism with regard to health screening, as well as with a predisposition to comply with recommendations to return for additional screening examinations. Indeed, there is evidence showing that trusting of others is an important factor in health care utilization. Also, the result of the study showed that openness to experience has a significant influence on preventive health behaviour. This result corroborate the study of Roberti(2004) who opined that Openness to Experience refers to the extent to which an individual is intelligent and curious and has a proclivity for various new experiences . People high in

Openness are interested in seeking new thoughts and new ideas and expanding their base of knowledge. These “experience seekers” might be more proactive in seeking out information that might afford them some advantage in managing their health. In the context of the present study, people high in Openness may view participation in health screenings as a fruitful experience (e.g., because they gain exposure to new health-related scientific developments) and be motivated to repeat it. Also, Iwasa (2009) found a positive association between Openness and participation in mass health check-ups among Japanese elderly living in community housing. One possible explanation for the negative association found in his study could be that individuals with high levels of trait Openness might be more proactive in seeking alternative means of maintaining their health once an initial screening has been conducted. As these individuals tend to seek new experiences and are considered being intelligent and curious, they may perceive repeat participation in the same type of health screening as redundant. Also, individuals high in trait Openness trust their own ability to make judgments about their health conditions and needs, and therefore prefer to adjust their own health-promoting behaviors instead of returning to health screenings. A third possible explanation is that people high in Openness often exhibit many nonconformist behaviors (Woods & Hampson, 2010), such as rejecting authority and social norms, and therefore avoid routine utilization of health screenings that are sponsored by their employers. A different explanation may stem from the characterization of individuals high in trait Openness as sensation seekers who

tend to adopt unhealthy behaviors such as substance abuse.

Hypothesis two states that age will significantly influence preventive health behaviour and it was observed from the study that age does not influence preventive health behaviour ( $F(2, 195) = .294, p > .05$ ). This result is consistent with the study of Flynn (2007) who posited that there is no relationship between age and preventive health behaviour. An individual may exhibit preventive health behaviour irrespective of his age and exhibiting this behaviour is predominantly determined by the knowledge and awareness of such individual about the exercise. For instance, a young individual may feel exercise is good for his body while an older may feel in another way and vice versa. Eating certain foods may be a form of preventive for one person and it may be another thing for the other ones.

## VIII. CONCLUSION

Based on the discussion, it is reasonable to conclude that agreeableness has an influence on preventive behaviour, openness to experience influence preventive health behaviour and age does not have an influence on preventive health behaviour.

## IX. RECOMMENDATION

Having drawn a conclusion, it is recommended that government should formulate policy that will enhance preventive health behaviour among individuals and organisation.

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