

Preventive Health: Implication of Type C Personality and Perceived Self-Efficacy among Academic Support Staff in Two Tertiary Universities in South-West, Nigeria.

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Abstract

Despite the importance of academic support staff in university settings, research conducted among this select group have not received attention that it actually deserve. This study examined preventive health: implication of type c personality and perceived self-efficacy among academic support staff in two tertiary universities in south-west, Nigeria. This study was a cross-sectional survey design. The dependent variable was preventive health behaviour, while predictor variables are, self-efficacy and Type C personality. The participants for the study were selected from a pool of academic support staff of Adekunle Ajasin University, Akungba-Akoko, and Federal University of Technology, Akure all situated in Ondo State. The total number of participants for this study were three hundred and forty-six (346). Self-Efficacy Scale (SES) developed by [1] and the Revised Infectious Diseases Preventive Health Behaviour Scale (IP-PHBS), which was re-validated by [2] as well as, Type C Personality Inventory (TCPI) was developed by [3] were the instruments used to collect responses. Pearson Product Moment Correlation was used to test the extent and direction of study variables used in the study. However, for hypothesis 1, 2 and 3 were tested using multiple regression analysis. The results showed that Type C personality significantly predicted preventive health among academic support staff in two public owned universities in South-West, Nigeria [$\beta = .45, p < 0.01$]. The results also indicated that self-efficacy was a significant predictor of preventive health behaviours [$\beta = .41, p < 0.01$] and the joint contributions of the predictor variables were also significant [$R^2 = .57, F = 11.62; p < .05$]. Based on the results of this study, it was recommended that psychologists should be involved in decision making and conscription processes when recruiting academic support staff in universities, they can act in advisory capacity in the formulation of administrative policies that integrate professional practice and executive management functions.

Keywords: Type C personality; self-efficacy; preventive health behaviour; academic support staff.

Abbreviations: SES: Self-Efficacy Scale, IP-PHBS: The Revised Infectious Diseases Preventive Health Behaviour Scale, TCPI: Type C Personality Inventory



Introduction

University administration is a demanding task, one that requires high levels of competence and professionalism. The duties and responsibility of academic support is an intricate one because, it synergies the activities of the students and that of the academic employees to ensure the effective and smooth running of the university. In so doing, academic support staff are expected to effectively deal with different personalities, interests, emanating from diverse cultures and these administrator are still expected to demonstrate professionalism and fairness while maintaining an acceptable ethical standard in line with the overall objectives of the university management. The importance of academic support to overall employee effectiveness and student performance is significant for training and academic staff performances.

Academic support staff sometimes referred to as non-academic staff, is often described as a variety of staff members who provide specialized instructional and operational support to academic staff, as well as, support to students while they utilize the university's facilities [4]. Academic support staff provide employees with administrative support and they offer assistance and guidance to students who would require special attention, and these support extends to those with physical disabilities within the institution [5]. Information such as, staff welfare, conscription, promotion and appointments, healthcare, student-lecturer protocols, security, student academic and health records are handled administratively by this special category of workers. Such is the importance attached to the duties and responsibilities of school administrators.

Although, some research studies [6,7] have demonstrated that there is link between personality characteristics and preventive health behaviour. For instance, these authors have suggested individuals with agreeableness and conscientiousness personality tend to engage more in preventive health behaviours than their counterparts with lesser levels of conscientiousness personality [8]. Authors such as, Israel *et al.* (2014) explained that conscientious individuals have a higher tendency to exhibit active lifestyles, maintain healthy diets and show more self-control, so they are less likely to engage in promiscuity and/or smoking behaviours, and this position alludes a significant relationship

between personality and preventive health behaviours. Regardless of these results, few authors have been able to explain the role of Type C personality in the study of preventive health behaviours.

Openness to experience, conscientiousness and agreeableness personality traits have been linked to preventive health behaviours in previous studies [9]. However, it is imperative to state here that, empirical studies that have examined the relationship between Type C personality and preventive health behaviours are relatively scant in scientific literature. Therefore, this study attempts to examine the predictive value of Type C personality on preventive health behaviours. The reason for considering this particular personality structure is that individuals with Type C personality trait are often regarded as individuals who possess positive traits, such as being pragmatic, demonstrating dedicated focus on other people and compliance to social norms) and like any other personality trait, they also present negative traits for the reason that, they are easily taken advantage of and they have a higher tendency to be acquiescent [10]. Alternatively, this category of personality often characterizes individuals who are generally regarded as introverted and intelligent people who pay ardent attention to details, and they are often career driven as well as, they pay place less emphasis on emotional appeal. Due to this characteristics, Type C individuals tend to have high hopes at work, in school and even in relation to family expectations [11].

Self-efficacy is an important factor in determining a variety of behaviours. Self-efficacy refers to one's ability to exercise authority and control situations, events and circumstances that result from one's interaction with others and the society [12]. Self-efficacy is a cognitive evaluation of one's belief and perception towards things other than interfere with one's self. The importance of self-efficacy to human behaviour cannot be over emphasized, for the reason that, self-efficacy in individuals influence intention to act on behaviour change through effort and sustainability in the presence of situations that may portend threat or risk [12]. Several studies have demonstrated the importance of self-efficacy in health behaviours, for instance, self-efficacy has been showed to be a significant predictor of physical, social and self-evaluative outcome expectancies regarding health behaviours [13,14].



The current spread of Covid-19 virus and other infectious diseases have placed a huge burden for academic support staff within university populations. Academic support staff have been compelled to create awareness, and monitor, the strict observance of healthcare practices and protocols. Therefore, academic support must engage in preventive health practices. When considering the duties and responsibilities of academic support staff, it becomes imperative that the certain characteristics will be of paramount importance for the successful execution of duties by academic support staff. With this in mind, scholars have reported that the staff training, experience and personality portend significant implications in determining proficiency among employees [15]. More specifically, the personality characteristic of non-academic employee may hold important outcomes for the successful practice of preventive health.

Statement of Problem

Despite the importance of academic support staff in university settings. Research conducted among this select group have not received attention that it actually deserves, the reason for this situation in scientific literature can be linked to negligence or handling with ‘kids gloves’ the importance of university school administrators in university management and administration. Negligence of this important area may portend huge healthcare expenditure for the Ministry of Education and the Federal Government, as such, understanding the importance of employee personality on preventive health practices would save the educational system preventable expenditure that impeded the growth and development of the education system in Nigeria.

The paucity of scientific literature in examining the predictive value of Type C personality on preventive health among academic support staff within university community, lays credence to the importance to conduct studies in this direction. As such, this studies tries to fill this void by examining whether Type C personality will predict preventive health behaviours among academic support staff in universities. The outcomes of the study portend important implications for conscription and training as well as, policy formation and application for academic management boards and other stakeholders in the education sector.

Objectives of the Study

In relation to the identified problems of the study. The general objectives of the study was to examine how Type C personality and self-efficacy would predict preventive health behaviour among academic support staff in two public owned universities in South-West, Nigeria. The specific objectives of the study were to;

1. Determine whether academic support staff from the two selected universities, who score high on the measure Type C personality would show significantly higher tendency to engage in preventive health behaviour.
2. Ascertain whether academic support staff from the two selected universities, who score high on the measure self-efficacy measure would show significantly higher tendency to engage in preventive health behaviour.
3. Examine whether Type C personality and self-efficacy will jointly and significantly predict preventive health behaviour among academic support staff from the two universities.

Research Hypotheses

Based on the objectives of the study, the following hypotheses were formulated;

1. Type C personality significantly predict preventive health behaviour among academic support staff from the two universities.
2. Self-efficacy will significantly predict preventive health behaviour among academic support staff from the two universities.
3. Type C personality and self-efficacy will jointly significantly predict preventive health behaviour among academic support staff from the two universities.

Methods

Research Design

A cross-sectional survey design was adopted in the study. The dependent variable was preventive health behaviour, while predictor variables are, self-efficacy and Type C personality.

Participants

The participants for the study were drawn from both government owned universities in Ondo State, South-West Nigeria. The participants for the study were selected from a pool of academic support staff of Adekunle Ajasin Technology, Akure all situated in Ondo State. The total



University, Akungba-Akoko, and Federal University of number of participants for this study were three hundred and forty-six (346). There were more males (65%) than females (35%). Majority of participants were between the ages of 31-50 years (69%). Data on job tenure showed that 42% of the samples have spent 6-10 years in both universities only 7% have spent more than 15 years. Lastly, majority of participants had bachelor's degrees (67%) while, others had postgraduate certifications, Master's degree (13%) and other professional qualifications made up the remaining 20%.

Sampling Techniques

A non-probabilistic sampling technique was used in the study. The choice of universities used came about as a result of the proximity of both universities which are located in the same geographical region in Ondo State. Also, the short frame of time the study was conducted did not permit for a more rigorous sampling technique to be used. In addition, the academic support staff selected for this study were those who have been working for over six-months and those who volunteered to participate in the study were recruited using convenience sampling technique.

Instruments

The study made use of a self-reported questionnaire, which comprises of four sections (A-D). Section A: Socio-Demographic information on: age, sex, educational qualification and job tenure of the respondents. Section B, Self-Efficacy Scale: (SES). Self-Efficacy Scale was used to measure self-efficacy. The SES was developed by Schwarzer and Jerusalem (1995). The SES is a 10-item scale measured on a 4-point scale, ranging from 1- 'Not all true' to 4- 'Exactly true'. Examples of the items are 'I can always make to solve difficult problems, if i try hard enough' and 'It is easy for me to stick to my aims and accomplish my goals'. Schwarzer and Jerusalem (1995) reported the reliability ranged from a low of .76 a high of .92, reflecting acceptable internal consistency. The SES was scored by summing the total number of responses, divided by the total number of items, as such high scores indicate self-efficacy, and low scores indicate lower tendency in self-efficacy in an individual or group of individuals. The SES was validated by [16] the concurrent validity of the SES, with academic staff and undergraduates with the Self-Efficacy Scale: (SES), with 5 items to evaluate

the presence of self-efficacy symptoms which has been validated for its use on academic population. The present study reported a Cronbach's Alpha reliability coefficient of .90. The pilot study showed a construct validity of the items of the SES revealed the Kaiser-Myer-Olkin measure of sampling adequacy was KSO-MSA= .87. The SES explained 31.6% of the variance with an eigenvalue of 3.17 and Cronbach's Alpha of .88.

Section C: The Revised Infectious Diseases Preventive Health Behaviour Scale (IP-PHBS), was re-validated by Ayandele *et al.* (2020). This scale consist of twelve items each rated on a 7-point Likert type measurement. The items were generated from the Protection Motivation Theory. The scale was developed and initially validated in a nation-wide sample from Nigeria (N=703). Sample of items include 'I want people to be tested for infection' and 'I avoid going to public places'. These authors reported a Cronbach alpha of .92. The scores of the entire 12 items are summed up to obtain a composite score for the participant's preventive health behaviour. As such, the higher the composite score the more significant the individual participants' adherence to infectious diseases preventive health behaviour [2].

Section D: Type C Personality Inventory (TCPI) was used to measure Type C personality in participants of this study. The TCPI was developed by Hosaka, Fukunishi, Aoki, Rahe, and Solomon, (1999). The TCPI is a 30-item measurement that is measured on a 4-poiny scale, ranging from 0 (never) to 3 (all the time). The TCPI is a multi-dimensional scale that measures Type C personality across five spectrums; Emotional 'How readily can you tell if someone is angry', 'Do you avoid making difficult decisions'. Social 'Do you try to avoid conflict with others', 'Are you courteous, even to disagreeable persons'. Service 'How regularly do you give to charity' 'How often do you ask others for help'. Assertion 'How frequently do you stand-up for yourself', 'Do others take advantage of your generosity'. Power 'How often does life come out the way you would like it to' 'How frequently are you happy and contented'. Hosaka et al. (1999) reported a Cronbach alpha of .93. The total score is calculated by summing up all the scores of the various dimensions. Higher scores indicate increased levels of Type C personality in participants.



Data Analysis

Data analysis was conducted to determine the extent and direction of associations among the study variables, Pearson Product Moment Correlation was used to test the extent and

direction of study variables used in the study. However, for hypothesis 1, 2 and 3 were tested using multiple regression analysis.

Results

Table 1: PPMC Correlation Matrix Showing the Relationships among Study Variables

Variables	1	2	3	4	5	6
1. Age	1	.10*	.10**	.11	.19**	.21**
2. Gender		1	.04	.03	.03	.01
3. Religious Affiliation			1	.21**	.32***	.38***
4. Self-efficacy				1	.29**	.34**
5. Type C personality					1	.44***
6. Preventive health behaviour						1
Mean	44.34	36.81	7.17	56.18	137.57	18.91
SD	7.48	4.38	1.74	3.99	17.75	3.68

Note: ***/+ p < .001, **/+ p < .01, */+ p < .05, N=346, Gender: Male-1, Female-2;

Religion: Christianity-1, Islam-2; Others -3.

Results of PPMC is presented in **bold** form.

In **Table 1** while testing the socio-demographic factors of the respondents with preventive health behaviour, it was observed that age of participants was significantly and positively related to preventive health behaviour [$r(346) = .21^{**}, p < .01$] and participants gender [$r(346) = .01, p < .01$], indicated that there was no significant relationship with preventive health behaviour. However, religious affiliation showed significant positive relationship with preventive health behaviour [$r(346) = .38^{**}, p > .05$]. The result also showed that there was a significant positive relationship

between perceptions of self-efficacy and preventive health behaviour [$r(346) = .34^{**}, p < .01$]. The relationship between Type C personality and preventive health was positive [$r(346) = .44^{***}, p < .001$], such that, as participants indicate a higher level of Type C perception so does the level of preventive health behaviour increases for the participants. A negative significant relationship was realized between Preventive health behaviour and prosocial behaviour [$r(346) = -.21, p < .01$], such that prosocial behaviour decreases with increase in preventive health behaviour.

Table 2: Summary of Multiple Regression Analysis Showing the Predictors of Type C Personality and Self-Efficacy on Preventive Health among Academic Support Staff in Two Public Owned Universities in South-West, Nigeria.

Dependent	Independent	B	t	p	R	R ²	df	F
Preventive Health Behaviour	Type-C Personality	.45	.53	<0.05	.35	.57	346(3)	11.62**
	Self-Efficacy	.41	.42	<0.01				

**<0.01* p<0.05, N=346

The results of the (**Table 2** above) showed that Type C personality significantly predicted preventive health among academic support staff in two public owned universities in South-West, Nigeria [$\beta = .45, p < 0.01$]. The outcome of this result indicate that Type C personality was a significant

predictor of preventive health behaviours among academic support staff in public owned universities in South-West, Nigeria. Therefore, the alternate hypotheses 1 was accepted. Similarly, the outcome of the results also indicated that self-efficacy was a significant predictor of preventive health



behaviours [$\beta = .41, p < 0.01$] among academic support staff from public owned universities in the South-West, Nigeria. This result suggests that there is positive significant relationship between participant's perception of self-efficacy and preventive health behaviour. For hypothesis 3, the joint contributions of the predictor variables (Type C personality and self-efficacy) were also significant [$R^2 = .57, F = 11.62; p < .05$]. The R^2 indicates that this observed joint prediction accounted for 57% of the total influence on the Type C personality and self-efficacy on preventive health behaviours among academic support staff. The other 43% emanate from other sources outside the variables in the study.

Discussion

Based on the results of the study, it can be inferred that the three hypothesis showed significant predictive value on preventive health behaviour among academic support staff. Hypothesis one, which stated that Type C personality will significantly predict preventive health behaviour was accepted. One plausible reason for this outcome as corroborated by several authors, for example, [10,11], who explained that individuals with Type C personality trait are often regarded as individuals who possess positive traits, such as being pragmatic, demonstrating dedicated focus on other people and compliance to social norms [10]. This predisposition sets increases their tendency to preventive rather than treat an avoidable situation. Hypothesis two, which suggested that self-efficacy would significantly predict preventive health behaviour among academic support staff was also significant. Researchers over the years have linked self-efficacy to a variety of behavioural outcomes. Self-efficacy in individuals influence intention to act on behaviour change through effort and sustainability in the presence of situations that may present threat [12]. These studies revealed the importance of self-efficacy in health behaviours, for instance, self-efficacy has been showed to be a significant predictor of physical, social and self-evaluative outcome expectancies regarding health behaviours [13,14].

Conclusion

Scientific literature has examined the role of personality and self-efficacy across a range of psycho-socio variables, and

most studies have demonstrated progress in understanding and management of preventive health behaviour. Type C personality holds important solutions to the understanding of preventive health behaviours. The importance of preventive health, self-efficacy and personality to psychology does not only provide proactive management to health related problems, it also portends a comprehensive benefit for public healthcare. This study was conducted to examine Type C personality and self-efficacy would predict preventive health behaviour among academic support staff in two public owned universities in South-West, Nigeria. The results of the study have showed that self-efficacy and Type C personality are strong predictors of preventive health among academic support staff.

Recommendation and Suggestions for Future Research.

Based on the results of this study, the following propositions are suggested:

1. Psychologists should be involved in decision making and conscription processes when recruiting academic support staff in universities, they can act in advisory capacity in the formulation of administrative policies that integrate professional practice and executive management functions. This will provide a platform for testing potential recruits' personality type that would suit the overall mission and vision of the university. This position will mitigate healthcare challenges as well as, help reduce healthcare expenditure on a sustainable basis.
2. Psychologists in educational settings should offer vocational behavioural workshops that would expose academic support staff to learn proactive ways of dealing with preventive health behaviours and the attendant problem that comes with it. Workshops such as these would provide enlightenment, reduce the dependence on medication and encourage healthy lifestyles.

Future studies should consider inculcating more variables such as self-esteem and health-seeking behaviour in the understanding and management of preventive health behaviours in university populations.

Reference

1. Schwarzer R, Jerusalem M. (1995) Generalized self-



- efficacy scale. In J Weinman S Wright and M Johnston. Measures in health psychology: A user's portfolio Causes and control beliefs Winsdor. UK: NFER-NELSON. 35-37.
2. Ayandele O, Kolawole S, Ramos-Vera CA, Oguntayo R, Gandi J, et al. (2020) The Infectious Diseases Preventive Health Behaviour Scale (ID-PHBS): Development and validation with African sample.
 3. Hosaka T, Fukunishi I, Aoki T, Rahe RH, Solomon GF. (1999) Development of a Type C Inventory: Cross-cultural applications Tokai. *Journal of Experimental Clinical Medicine*. 24(2) 73-76.
 4. Ray S, Lambie G, Curry J. (2007) Building caring schools: Implications for professional for professional school counselors *Journal of School Counselling*. 5(14): 3-6.
 5. Ogunbodede K, Ambrose SE. (2020) Information needs and use of non-academic staff in university of Africa Bayelsa State Nigeria *Library Philosophy & Practice*. (e-journal) 4839.
 6. Wolf M, Weissing FJ. (2010) An explanatory framework for adaptive personality differences *Philosophical Transactions of the Royal Society of Biological Sciences*. 365: 3959-3968.
 7. Isreal S, Moffit TE, Belsky DW, Hancox RJ, Poultron R, et al. (2014) Translating personality psychology to help personalize preventive medicine for young adult patients. *Journal of Personality & Social Psychology*. 106(3): 484-498.
 8. Arowosegbe CK, Olajide OA, Akeredolu AY. (2019) Personality characteristics as predictors of preventive health behaviour. *World Journal of Innovative Research*. 6(6): 1-4.
 9. Delima VJ. (2020) Impact of personality traits on employees job performance in Batticaloa Teaching Hospital *IRE Journals*. 2(12): 1-13.
 10. Rymarczyk K, Turbacz A, Wlodzimierz S, Ciecuch J. (2020) Type C personality: Conceptual refinement and preliminary operationalization *Frontiers in Psychology* 11.
 11. Pelinkanten P, Gumustekin G, Kanten S. (2017) Exploring the role of A B C and D personality types on individual's work-related behaviours and health problems: A theoretical model *International Journal of Business & Management Invention*. 6(7): 2-10.
 12. Urdan T, Pajares F. (2006) Self-efficacy in adolescents. In self-efficacy beliefs in adolescents; Urdan T and Pajares F (Eds) *Information Age Publishing: Charlotte NC USA*.
 13. DeVellis BM, DeVellis RF. (2000) Self-efficacy and health. In: A Baum T A Reverson & J E Singer (Eds) *Handbook of health psychology Mahwah NJ: Erlbaum*. 235-247.
 14. Luszczynnska A, Gutierrez-Dona B, Schwarzer R. (2005) General self-efficacy in various domains of human functioning: Evidence from five countries. *International Journal of Psychology*. 40: 80-90.
 15. Rodrigues J, Walters K. (2017) The importance of training and development in employee performance and evaluation. *Worldwide Journal of Multidisciplinary Research & Development*. 3(10): 206-212.
 16. Omoluabi PF. (1999) *Self-efficacy scale Lagos: PPC Nigeria Agency*.