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PERSONALITY TRAITS AS PREDICTORS OF SOMATIC SYMPTOMS AMONG GOVERNMENT RETIREES IN ENUGU STATE

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ABSTRACT
The study explored personality traits as predictors of somatic symptoms among government retirees in Enugu State. A total of 376 participants were drawn from the population of retired civil servants from the Nigeria Union of Pensioners (NUP) Enugu State. They comprised of 208 men and 168 women with the age range of 56 to 82 years with mean = 73.59 and Standard deviation = 5.72. Purposive sampling technique was used to select the participants. Somatic Symptom Scale-8 (SSS-8; Gierk et al., 2014); Eysenck Personality Questionnaire (EPQ; 1975); and Cognitive Styles Questionnaire (CSQ; Ancona et al, 1997) were used as research instruments. Correlation design was adopted while Hierarchical Multiple Regression statistics and Moderated Multiple Regression were used to analyze the data. Results showed that introverted personality trait positively predicted somatic symptoms (β = .30, t = 6.01, p<.01), while extroverted personality trait negatively predicted somatic symptoms (β = -.21, t = -4.05, p<.01). It was also found that judging cognitive style negatively predicted somatic symptoms (β = -.19, t = -3.27 p<.01) while perceiving cognitive style positively predicted somatic symptoms (β = .20, t = 4.00, p<.01). Finally, the result showed that interaction between perceiving cognitive styles and introversion personality trait is significantly positive (t = 2.97, P < .05; LLCI, ULCI = .05, .24); interaction between judging cognitive styles and extroversion personality trait is significantly negative (t = -2.60, P < .05; LLCI, ULCI = -.20, -.03) and interaction between perceiving cognitive styles and extroversion personality trait is significantly positive (t = 4.50, P < .01; LLCI, ULCI = .08, .22). The outcome of the study not only contribute to academic discourse but also has practical implications for enhancing the well-being of retirees in Enugu State through tailored support systems that consider individuals psychological characteristics.

***Key Word**: Somatic symptoms, personality, Traits, Retirees, Pensioners*

BACKGROUND TO THE STUDY

The transition into retirement brings major changes in social roles, routines, and finances, often causing feelings of loss tied to identity and purpose (Morrison et al., 2020). Retirees commonly face reduced social interactions, increasing loneliness and isolation, which raise the risk of depression and anxiety (Dang et al., 2022; WHO, 2023). Research shows retirees have a higher risk of somatic symptoms than working adults due to loss of social networks, economic shifts, and health issues (Atasoy et al., 2022; Zuelke et al., 2020; Pilehvari et al., 2023). About 14% of older adults live with mental disorders, with depression being prevalent (WHO, 2023). Stigma around mental health and generational beliefs often hinder retirees from seeking help (Cirelli, 2024).

Physical health and mental well-being influence each other, with poor physical health increasing somatic symptoms and untreated issues worsening ailments. Retirees with chronic diseases like cardiovascular disease or diabetes often face greater psychological distress (Dang et al., 2022; Dave et al., 2007). Retirement-related lifestyle changes, such as reduced physical activity and unhealthy behaviors like increased alcohol use and poor diet, negatively impact health. These factors contribute to declines in mobility, cognitive function, and higher risk of somatic symptoms. Overall, retirement poses social isolation is a major issue for retirees, with about a quarter experiencing loneliness that harms mental health (WHO, 2023). The loss of daily workplace interactions can cause feelings of purposelessness and social disconnection. Maintaining meaningful social activities is vital, yet many retirees find it challenging to engage post-retirement. Economic instability also affects well-being, especially in places like Nigeria where pension systems are inadequate and healthcare access is limited. Financial insecurity increases stress and somatic symptoms among retirees. These social and economic factors collectively impact retirees' mental and physical health (Dang et al., 2022; Dave et al., 2007).

The relationship between retirees and somatic symptoms is crucial, especially in Nigeria, where economic instability and poor governance affect retirees' well-being. Somatic symptoms—physical signs of psychological distress—are common among older adults and

often reflect emotional discomfort (Eccles & Kevin, 2020; Dahli et al., 2021). Nigerian retirees show a notably high prevalence of these symptoms (Ogunsemi et al., 2020). Older individuals are more prone to moderate to severe somatic symptoms than younger groups, influenced by physical illnesses and psychological distress (Verdurmen et al., 2017; Wu et al., 2022). Socio-economic challenges, including financial insecurity and limited healthcare access, worsen anxiety and depression among retirees. This creates a cycle where psychological distress leads to physical symptoms, complicating overall health. Many retirees face chronic pain, fatigue, and unexplained health issues as they adapt to retirement stress. Addressing these factors is vital to improving retirees' health outcomes in Nigeria.

Somatic symptoms greatly affect quality of life, especially in vulnerable groups like retirees. About 80% of people experience somatic symptoms monthly, but fewer than 25% seek medical help (Eckart, 2013). Retirees may have higher prevalence due to health and psychological stressors. These symptoms impair daily functioning, social activities, and relationships. The resulting anxiety can worsen physical complaints, creating a harmful cycle (Cleveland, 2022; Mayo, 2018). Somatic symptoms are linked to personality traits and cognitive styles (Tinakon & Nahathai, 2014). Traits like introversion and extroversion affect how people interact with their environment and manage stress (McCrae & Costa, 1997). Introversion involves a preference for solitude, deep reflection, and feeling drained by social interaction. Introverts often internalize emotions, leading to increased sensitivity to stress and physical symptoms such as fatigue, pain, or gastrointestinal issues. Research shows introverts are more prone to anxiety and depression, which worsen somatic symptoms (Wu et al., 2022). Retirees facing life changes may experience increased somatic symptoms due to internalized stress. Introverted retirees may particularly suffer from chronic pain and fatigue. Their tendency to avoid expressing emotional distress or seeking help can cause unresolved psychological issues to manifest physically. This highlights the need for targeted support for introverted retirees to address both emotional and somatic health.

Extroversion is characterized by sociability, assertiveness, and a preference for social engagement. Extroverts often rely on their social networks for support and tend to cope with stress through interaction. However, they can still experience somatic symptoms, especially when faced with overwhelming stress or loss of social connections in retirement. Retirement-related isolation may increase anxiety and physical complaints for extroverted retirees. While extroverts express stress outwardly, introverts tend to internalize feelings, leading to more somatic complaints (McCrae & Costa, 1997). Both personality types face unique challenges in managing somatic symptoms during retirement (Dahli et al., 2021). Understanding these differences is important for tailored support.

Statement of the Problem

Retirement is a major life transition impacting psychological and physical health, with unique dynamics in Nigeria's social context. Personality traits such as introversion and extraversion critically influence retirees' coping and health outcomes (Ogunsemi et al., 2023). Introverts tend to internalize stress, leading to increased anxiety and somatic symptoms. In contrast, extroverts often use social networks to manage stress and mitigate negative effects. These traits shape retirees' social engagement and adjustment to retirement. Understanding their role is key to supporting well-being during this transition.

Retirement negatively impacts retirees, many of whom exhibit somatic symptoms that reduce their quality of life and increase dependence on others (Phan et al., 2018). These retirees often rely heavily on medication, which can have additional health implications. Psychological factors like personality traits may influence somatic symptom expression. While prior studies examined these factors mainly in Western contexts (Rief et al., 2019; Khosravi et al., 2020; Van den Hout et al., 2022), none have focused on Nigerian retirees. This study addresses that gap by exploring the relationship within the Igbo cultural setting.

Hence, the study answered this pertinent question:

Will personality traits (Introversion, Extroversion) predict somatic symptoms among government retirees in Enugu Metropolis?

Theoretical Review

Psychodynamic theory (Freud, 2012)

Psychodynamic theory (Freud, 2012) explains somatic symptoms as physical expressions of unconscious emotional conflicts. Individuals may convert psychological distress into symptoms like pain or fatigue as a defense mechanism to avoid deeper emotional pain. The theory distinguishes between primary gains (internal relief from anxiety) and secondary gains (external benefits such as attention or support), both of which can reinforce symptoms. Negative emotions like anxiety and depression are closely linked to somatic symptoms, often leading to heightened sensitivity and misinterpretation of bodily sensations. Understanding somatic symptoms through this lens highlights the importance of psychotherapy that addresses both emotional conflicts and physical complaints to reduce reliance on symptoms for emotional expression (Zeng et al., 2016).

Cognitive theory (Beck, 1979)

Cognitive theory (Beck, 1979) explains somatic symptoms among retirees by focusing on how negative thought patterns and cognitive distortions amplify physical complaints. Retirees may catastrophize minor bodily sensations, interpreting normal aging changes as serious illness, which heightens anxiety and symptom awareness. Stressful transitions in retirement can worsen these symptoms, especially in those lacking effective coping strategies. This theory supports the use of cognitive-behavioural therapy (CBT) to help retirees challenge maladaptive thoughts and develop healthier coping mechanisms, reducing distress and improving daily functioning.

Jung's (1921) Personality Theory

Jung's (1921) personality theory provides a valuable framework for understanding psychological development in retirees by emphasizing individuation the integration of conscious and unconscious self—as central to aging. This process helps retirees find meaning and self-understanding through reflection on life experiences. Jung's concept of the collective unconscious, containing universal archetypes, allows retirees to engage with themes of loss and legacy. He viewed aging not as decline but as an opportunity for transformation, where new identities emerge and creative pursuits flourish (Bozarthl et al., 1996; Armstrong, 2020). Psychoanalytic personality theory, based on Freud's work, emphasizes unconscious processes, early experiences, and internal conflicts shaping personality across the lifespan, including retirement (Heuft, 1994; Wongpakaran & Nahathai, 2014). As retirees face changing roles and aging challenges, therapy exploring past emotional conflicts can provide insights and support (Holzman, 2019). This approach offers a rich understanding of retirees' psychological development and fosters empathy for their emotional struggles during this life stage.

Eysenck's Trait Theory (1947)

Eysenck's trait theory (1947), focusing on extraversion and introversion, offers key insights into how retirees adjust to retirement. Extraverted retirees generally report higher life satisfaction and greater post-retirement activity, while those low in neuroticism tend to experience more contentment (NERIS Analytics Limited, 2023; Schwaba & Wiebke, 2019). Understanding these traits helps retirees tailor their social engagement and coping strategies-extraverts benefit from seeking social opportunities, whereas introverts thrive by balancing solitude with comfortable social interaction. This theory highlights how personality shapes retirement experiences, aiding retirees in achieving a fulfilling transition.

Theoretical Framework

Using Beck's Cognitive Theory (1979) as a framework, personality traits like introversion and extroversion influence retirees' cognitive appraisals of bodily sensations.

Introverts may have a tendency for heightened self-focused attention, leading to increased negative interpretations of somatic symptoms. Conversely, extroverts might engage more in social activities, potentially distracting from or reframing somatic concerns more positively. These cognitive patterns shape emotional responses, with introverts possibly experiencing greater anxiety or rumination about health. Extroverts' positive cognitive schemas may buffer against stress-related somatic complaints. Thus, retirees' personality traits predict the frequency and intensity of somatic symptoms through their cognitive processing styles. This illustrates how personality modulates health perceptions post-retirement via Beck's cognitive pathways.

Empirical Review

Personality Traits and Somatic Symptom

Recent empirical studies have examined the links between personality traits and somatic symptoms. Hyphantis et al., (2013) found that higher neuroticism and introverted traits like self-sacrifice and self-criticism correlated positively with somatic symptom severity in 1,221 participants. Wongpakaran & Nahathai (2014) identified neuroticism as a significant predictor of somatic symptoms among 126 elderly individuals, with social inhibition mediating this relationship. Mostafaei et al., (2019) conducted a large-scale study with 4,763 employees, demonstrating neuroticism strongly predicted somatic symptoms, including gastrointestinal and respiratory issues. Overall, neuroticism emerges consistently as a key personality factor linked to somatization. Introverted traits and social inhibition also play important roles. These findings emphasize the psychological dimensions underlying somatic symptom severity.

In patients with chronic medical conditions, introverted traits like self-sacrifice and self-criticism were positively linked to somatic symptom severity, possibly due to coping styles and emotional processing (Hyphantis et al., 2013). The studies also highlighted how maladaptive defense mechanisms, often seen in individuals with high neuroticism, correlated with increased somatic symptoms. Depressive symptoms further intensified this relationship, showing a complex interaction between personality, emotional health, and physical symptom experience (Hyphantis et al., 2013). This suggests that emotional states connected to personality traits can heighten the perception and reporting of somatic symptoms (Mostafaei et al., 2019). The findings underscore the importance of addressing emotional and defense mechanisms in managing somatic complaints.

A study in Pain Medicine found that higher introversion was linked to decreased chronic pain interference during social distancing, mediated by less sleep disturbance and depression, while extraverts experienced increased pain interference (Flowers et al., 2022). This indicates personality traits affect pain perception under stressful conditions. Additionally, a graduate study by Balder (2007) revealed that introverts are more vulnerable to depression due to lower self-esteem and less social support, which may increase somatic symptom reporting as an expression of emotional distress. Together, these findings highlight how introversion influences both mental well-being and physical symptom experience.

A study in Psychosomatic Medicine (2016) found that older patients with medically unexplained symptoms (MUS) scored higher in neuroticism and agreeableness but lower in extraversion compared to controls, linking these traits to health anxiety and somatization (van Dijk et al., 2016). Physical and mental health are closely interconnected in psychosomatic conditions, with symptoms arising from either organ dysfunction or psychological causes (Watten et al., 1997). Among employees with somatization symptoms, 66% attributed their condition to both physical and psychological factors, with psychological anxiety serving as a key mediator. Personality traits, particularly higher neuroticism and lower extraversion, were identified in 52.6% of individuals with somatization and psychological distress (Mostafaei et al., 2019). Personality dysfunction is hypothesized to be a core clinical issue in somatization, with comorbidity rates between 48% and 72%. These somatic symptoms significantly impact psychological well-being and are closely tied to personality profiles (Folkman & Greer, 2000). Overall, personality traits play a crucial role in the manifestation and experience of somatic symptoms.

Evidence indicates that personality factors correlate with persistent somatic symptoms. Higher neuroticism and conscientiousness are linked to upper and lower gastrointestinal symptoms, while lower agreeableness relates to upper gastrointestinal and respiratory symptoms (Mostafaei et al., 2019). High neuroticism also predicts psychological distress in medically unexplained symptoms, contributing to elevated somatic symptoms (Menon et al., 2018). Chapman et al., (2016) investigated associations between the five-factor personality traits and health outcomes using the SF-36 in older primary care patients. Henning et al., (2017) studied personality traits' influence on subjective well-being during retirement transition using variable- and person-oriented models. Schwaba and Bleidorn (2017) explored changes in Big Five traits five years before and after retirement, finding significant individual differences in personality development but no clear moderators accounting for these differences. These studies collectively highlight personality's complex role in health and well-being across life stages. Pocnet and Jopp (2021) found that personality traits support continuous development and resilience, aiding successful aging. Canada et al., (2020) showed that lower conscientiousness and higher neuroticism increased fall risk in older adults, mediated by disease burden, depression, and inactivity. Grouper et al., (2021) identified specific personality traits linked to high pain sensitivity using the Five Factor Inventory and Pain Catastrophizing Scale in groups with low versus high pain sensitivity. Wettstein et al., (2022) studied pain trajectories among very old adults (87-102 years), finding that time to death better predicted pain variability than chronological age. These studies highlight personality's role in resilience, physical health risks, and pain sensitivity across aging. Personality assessments can help identify individuals at risk for adverse outcomes like falls and chronic pain. The findings emphasize integrating personality factors in health monitoring and intervention strategies for older populations.

In Nigeria, Okhakume and Aguiyi (2012) studied 250 retirees in Akure, examining how the Big Five personality traits influence psychological well-being. Results showed that these traits collectively predicted retirees' psychological well-being ($F(5,238) = 4.215$, $p < .001$). Specifically, conscientiousness and openness independently predicted better psychological well-being ($B = -0.322$, $t = -4.068$, $p < .001$; $B = -0.210$, $t = -3.062$, $p < .01$). Divorced retirees experienced worse psychological well-being compared to widowed, single, or married retirees ($F(3,240) = 4.74$, $p < .01$). Additionally, males scored higher on somatic symptoms than females ($t(24\%) = 2.64$, $p < .01$). The study highlights personality traits and marital status as important factors in retirees' mental health in this Nigerian context.

Okonkwo and Ekeke (2017) found that extraversion significantly predicted retirement stress ($p < .05$), while conscientiousness did not ($p > .05$), highlighting extraversion's role in coping with retirement stress. Ugwu et al., (2021) examined proactive personality, social support, and subjective career success in relation to pre-retirement anxiety. They found negative relationships between these factors and dimensions of pre-retirement anxiety, including financial preparedness, social obligation, and social orientation. Subjective career success also mediated the link between proactive personality and pre-retirement anxiety. Together, these studies emphasize the impact of personality and social factors on retirement-related stress and anxiety. Ugwu et al., (2019) developed a measurement tool for pre-retirement anxiety using a Nigerian sample of 424 civil servants, finding no significant overall gender differences in anxiety scores ($F(1,423) = 3.113$, $p = 0.08$). However, women reported significantly higher social obligation anxiety than men ($F(1,423) = 4.43$, $p = 0.05$), with no significant gender differences in preparedness or social alienation scores. Although the study did not explore personality traits or cognitive styles, it highlighted the development of pre-retirement anxiety in civil servants. Ugwu and Idemudia (2023) further examined proactive personality, social comparison, and retirement anxiety, finding that proactive personality negatively predicted retirement anxiety. Civil servants with proactive personalities often engage in entrepreneurial activities to support savings. Social comparison mediated the relationship between proactive personality and financial preparedness-related retirement anxiety.

Ogunsemi et al., (2023) examined the predictive influence of Big Five personality traits on retirement anxiety among non-academic university staff in Osun State, Nigeria. They found a high prevalence of retirement anxiety at 85.1%. Specifically, 13%, 16%, and 12.5% of participants exhibited high levels of anxiety related to personal obligation, financial planning, and social detachment, respectively. Socio-demographic and personality traits together accounted for significant variance in personal obligation (16%), financial planning (29%), and social detachment (22%) dimensions of retirement anxiety. Personality traits like extraversion, agreeableness, conscientiousness, and neuroticism, along with age, education, job tenure, and status, jointly predicted these anxiety dimensions. The findings highlight the complex role of individual differences and demographics in retirement anxiety. Ogunsemi et al. (2023) emphasize the urgent need for psychosocial interventions aimed at staff populations at risk. This approach could improve retirement adjustment and mental health outcomes.

Hypothesis

Personality traits (Introversion, Extroversion) will significantly predict somatic symptoms among government retirees in Enugu Metropolis?

METHOD

Participants

A total of 376 participants were drawn from the civil service retirees of Nigeria Union of Pensioners (NUP), Enugu State. They comprised of 208 men and 168 women. The age ranges of the participants were 56 years to 82 years. The mean and the standard deviation of their age were 73.59 and 5.72 respectively. The participants were all of Christian religious affiliation with minimum educational level of Senior Secondary School Certificate and maximum of Masters Degree. Mix sampling techniques (purposive, available) were adopted for the study. Purposive sampling technique was used to select the participants. That was because the inclusion criteria were those who were retired and with only somatic symptoms while the exclusion criteria were those with specific physical condition (e.g., heart disease, diabetes, Asthma, Stroke). Also, only the retirees who were willing participated in the study. The sample size was derived using the statistical formula for known population known (Yamane 1967).

Instruments

Somatic Symptom Scale-8 (SSS-8; Gierk et al., 2014)

The Somatic Symptom Scale-8 (SSS-8), developed by Gierk et al. (2014), is a brief self-report measure of somatic symptom burden, especially symptoms without clear medical causes, aiding DSM-5 somatic symptom disorder diagnosis. It assesses eight common somatic complaints frequently seen in primary care. Respondents rate how much they were bothered by each symptom in the past week on a 5-point Likert scale from 0 (Not at all) to 4 (Very much). Total scores range from 0 to 32 and are categorized as no to minimal (0–3), low (4–7), medium (8–11), high (12–15), and very high (16–32) burden. Higher scores indicate greater symptom burden and possible psychological distress or medical issues. The scale takes about one minute to complete, with scoring by summing responses. These categories support clinical interpretation and decision-making (Gierk et al., 2014; Elmar, 2016).

The Somatic Symptom Scale-8 (SSS-8) demonstrates excellent internal consistency with a Cronbach's alpha of 0.81, and all item-total correlations exceed 0.40, indicating reliable measurement (Gierk et al., 2014; Elmar, 2016). It shows strong construct validity, correlating positively with depression (r = 0.57) and anxiety (r = 0.55). Derived from the validated PHQ-15, its content validity is high (Elmar, 2016). In a Nigerian pilot study with retired civil servants, a Cronbach's alpha of 0.82 and intrinsic validity of 0.91 were reported, supporting its reliability and validity in that population.

Eysenck Personality Questionnaire (EPQ; Eysenck, & Eysenck, 1975)

The Eysenck Personality Questionnaire (EPQ; Eysenck, & Eysenck, 1975) is a psychometric tool designed to assess personality traits along three primary dimensions: **Extraversion, Neuroticism**, and **Psychoticism.** This questionnaire has undergone various revisions, leading to the Eysenck Personality Questionnaire-Revised (EPQ-R) and its abbreviated forms. The EPQ is typically administered as a self-report questionnaire. Respondents respond to a series of questions that capture their behaviors and emotions. The 21 item measuring extroversion/introversion were extracted from the original EPQ consisting of 90 items. Each item is usually answered in a binary format (e.g., "yes" or "no") or using a Likert scale for more nuanced responses as used in the study. The scale is scored directly and inversely on a 5-point Likert format: 1 = Not at all; 2= a little bit; 3 = moderately; 4 = quite a bit; 5 = extremely. Items 6, 8, and 12 are inversely scored while 1, 2, 3, 4, 5, 7, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, and 21 are directly scored. A highest possible score of 105 and a least possible score of 21 was expected from a given respondent. Typically, a higher score introversion- extroversion dimension will be termed an extrovert, while a lower score is labelled an introvert.

The extraversion scale demonstrates good reliability, with internal consistency (Cronbach's alpha) ranging from 0.74 to 0.84 and test-retest reliability between 0.70 and 0.90 (Scheibe et al., 2021; Alexopoulos & Ioannis, 2004). The Eysenck Personality Questionnaire (EPQ) shows high test-retest reliability of 0.80 to 0.90 and solid construct validity, supported by factor analyses aligning with Eysenck's model. The EPQ has been widely used in personality research, including studies in Nigeria (Jegede, 1980; Awaritefe & Kadiri, 1981; Dada, 1992; Osinowo, 1994; Idemudia, 1997). In a Nigerian pilot study with 40 retired civil servants, a Cronbach's alpha of 0.76 and intrinsic validity of 0.87 were obtained, confirming its reliability and validity in this population.

Procedures

A total of 401 copies of each of the instrument were administered within a period of 6 working weeks to the target population. The researcher formally introduced the study to the Chairmen of the Nigeria Union of Pensioners (NUP) in Enugu State. With the Chairman's permission, informed consent was obtained from all participants, emphasizing their right to withdraw at any time without consequences. Confidentiality and anonymity were assured, with data protection procedures explained. The research instruments were administered during the union's weekly meetings (Tuesdays and Thursdays) and during seminars and workshops over six weeks.

The two Chairmen served as research assistants, leveraging their familiarity with the participants to build trust and facilitate communication. They helped participants with physical limitations complete the questionnaires while maintaining response authenticity. The researcher was present to clarify any questions, promoting understanding and honest answers. Paper copies of the instrument were distributed at each meeting and administered at the end to include all willing participants. An introduction explaining the study's purpose was provided for newcomers. Completed questionnaires were collected immediately to ensure data integrity.

However, out of the number distributed 392 copies were collected while 376 (96%) copies correctly filled were scored and analyzed taking note of the sample size as calculated using Yamane (1976) sample size formula. Hence, 16 copies (4%) that were not correctly filled were discarded.

Design and Statistics

Correlation design was used in the study. This is because the researcher had no direct control of the study variables as their manifestations have already existed. The manifestations of the independent variable in the study were examined to ascertain their significant predictive relationship with the dependent variable.

The researcher adopted Hierarchical Multiple Regression statistics (SPSS version 27 was the software used in the analysis) to account for the contribution of each dimensions of the independent variables (personality traits) on the dependent variabl (somatic symptoms).

RESULTS

Table 1: Summary of Descriptive Statistics for Study and Demographic Variables

Variables	Mean	Std. Deviation	Minimum	Maximum	N
Age	73.59	5.72	56.00	82.00	376
Gender	.45	.50	.00	1.00	376
Introversion	8.68	1.98	4.00	19.00	376
Extroversion	17.99	1.70	14.00	21.00	376
Somatic Symptoms	30.51	4.38	19.00	39.00	376

Table 1 above shows mean, standard deviation, minimum, maximum scores of the demographic variables (age and Gender) and the study variables. Also, the table shows the total number of participants that took part in the study.

Table 2: Summary of Hierarchical Multiple Regression Analysis for Variables Predicting Somatic Symptoms (N=376)

	Step 1		**Step 2**	
	β	***t***	**β**	***t***
Age	.37	7.77**		
Gender	.13	2.74**		
Introversion			.30	6.01**
Extroversion			-.20	-4.05**
R	.38		.48	
R^2	.15		.23	
ΔR^2	.15		.09	
F	32.09(2,373)		20.98(2,371)	

*Note*p<.05;**p<.01*

Results of the hierarchical multiple regression for the test of the first factors of somatic symptoms index is shown in the Table 2 above. The variables were entered in stepwise models. The demographic variable (age) did significantly predict somatic symptoms (β = .37, t = 7.77, p<.01). Also, the demographic variable (gender) significantly predicted somatic symptoms (β = .13, t = 2.74, p<.01). Hence, the demographic variables (age and gender) serve as control variables in the study and that is why they are keyed in step 1

In step 2, a personality trait (Introversion, Extroversion) was entered and it was a significant predictor of somatic symptoms. Introversion personality trait positively predicted somatic symptoms (β = .30, t = 6.01, p<.01), while extroversion personality trait negatively predicted somatic symptoms (β = -.21, t = -4.05, p<.01). The contribution of personality trait in explaining the variance in somatic symptoms was 9% (ΔR^2 = .09). Hence, personality trait is a significant predictor of somatic symptoms among retirees. Therefore, hypothesis one which stated that personality trait (Introversion, Extroversion) will significantly predict somatic symptoms among retirees was accepted.

DISCUSSION

The hypothesis that personality traits (introversion, extraversion) would significantly predict somatic symptoms among government retirees in Enugu metropolis was confirmed. Introversion positively predicted somatic symptoms, with higher introversion scores linked to higher somatic symptoms. Conversely, extraversion negatively predicted somatic symptoms,

where higher extraversion scores were associated with lower somatic symptoms. Thus, retirees
high in introversion tended to report more somatic symptoms, while those high in extraversion reported fewer. This outcome supports the study's first hypothesis.

Hyphantis et al. (2013), Wongpakaran and Nahathai (2014), and Mostafaei et al. (2019) supported the study's first hypothesis on the link between personality traits and somatic symptoms. Understanding this connection among retirees requires examining psychological, social, and physiological factors. Introverts often internalize stress, leading to increased tension and physical manifestations like somatic symptoms. They may be more prone to anxiety and depression during transitions such as retirement (Osborne, 2012). Anxiety can cause physical symptoms like muscle tension and gastrointestinal issues. Additionally, introverts may engage in cognitive distortions, such as catastrophizing mild bodily sensations, which exacerbates somatic complaints. Social support is vital for mental and physical health during retirement, but introverts may struggle to build new relationships, leading to isolation and loneliness. Extroverts typically use more adaptive coping strategies by seeking social support, which helps buffer stress and lowers the risk of somatic symptoms. Higher extroversion is associated with reduced anxiety and depression, common precursors to somatic complaints (Macía, 2020). Retirees often face reduced structured social activities, with introverts preferring solitary pursuits like reading or gardening, potentially increasing isolation. Extroverts tend to maintain active social lives, gaining emotional support that lowers isolation. Studies show social engagement improves health outcomes, including fewer somatic symptoms (Lai & Nan, 2018; Kekäläinen et al., 2020). Extroverted retirees are more likely to join community activities, enhancing social networks and physical activity, both protective against somatic symptoms.

Introverts may perceive aging and retirement differently than extroverts, often feeling less motivated to participate in social or community activities, which can lead to withdrawal and increased somatic symptoms. Their stress response system (hypothalamic-pituitary-adrenal axis) may be more reactive, and chronic stress can cause dysregulation, contributing to health issues like inflammation and chronic pain. Psychological distress in introverts, often internalized rather than expressed, can heighten bodily awareness and somatic symptom reporting. Additionally, introverts tend to engage in less physical activity, increasing risks for obesity, cardiovascular disease, and somatic complaints. In contrast, extroverts generally have higher physical activity levels, supported by research linking extroversion to greater self-reported and objectively measured activity (Kekäläinen et al., 2020). This increased activity helps reduce the risk of somatic symptoms by improving physical health.

Implications/Relevance of the Study

The study found that personality traits, particularly introversion, predict somatic symptoms among retirees, underscoring important healthcare implications. Tailored support programs like peer groups can reduce loneliness and provide emotional support for introverted retirees. Educating healthcare providers and retirees about the risks linked to introversion is vital for effective symptom management. Incorporating personality factors into care can enhance the quality of life for introverted older adults.

Extroverted individuals cope better with stress due to sociability, assertiveness, and wider social networks that offer emotional support and reduce loneliness. This resilience lowers anxiety and depression, thereby decreasing somatic symptoms. Healthcare providers should encourage social engagement through community programs to boost retirees' well-being. Mental health interventions involving group activities may be particularly effective for extroverted retirees.

Limitations of the Study

The study on personality predicting somatic symptoms among retirees has limitations, including its focus on Enugu State, which may limit generalizability due to cultural and socio-

economic differences. Additionally, some participants initially refused to respond due to concerns about pension payments. However, the researcher built rapport to improve data collection. These factors should be considered when interpreting the findings.

Suggestions for Further Study

Future studies should incorporate longer follow-up periods to observe how personality traits influence somatic symptoms over time. Using diverse samples across socioeconomic, cultural, and ethnic groups will improve generalizability. Comprehensive assessments of emotional well-being, coping, and life satisfaction are recommended for a holistic view. Additionally, exploring interventions that modify personality traits and conducting cross-cultural research can deepen understanding and improve health outcomes for retirees.

Summary and Conclusion

The present study examined introversion and extraversion as predictors of somatic symptoms among retirees, finding that both traits significantly influence the experience of physical symptoms linked to psychological factors. The findings highlight the complex relationship between personality and somatic symptoms in older adults. They emphasize the importance of incorporating personality assessments in health evaluations of retirees. Certain personality trait combinations may worsen or alleviate somatic symptoms. This insight can guide the development of targeted interventions to enhance retirees' overall well-being by addressing both mental and physical health.

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