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Cognitive Styles as Predictors of Somatic Symptoms Among Government Retirees in Enugu State

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Abstract

The study explored cognitive styles 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); Cognitive Styles Questionnaire (CSQ; Ancona et al, 1997) were used as research instruments. Correlation design was adopted while Hierarchical Multiple Regression statistics. Results showed 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). 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.
Keywords: cognitive styles, somatic symptoms, retirees, civil servants, pensioner

Introduction

Retirement marks a profound transition in an individual's life, often signaling the end of formal employment and the beginning of a phase characterized by significant changes in daily routines, social roles, and health status. This transition is not merely a cessation of work but involves a complex process of adjustment to new life circumstances. Research underscores that retirement can have varied impacts on physical and mental health outcomes. For some, it ushers in opportunities for rest, leisure, and personal growth; for others, it may provoke stress and psychological challenges that contribute to the emergence or exacerbation of somatic symptoms. These somatic symptoms which include manifestations like chronic pain,

fatigue, and other physical complaints without identifiable medical causes can significantly impair retirees' quality of life (Dave et al., 2006).

The adjustment to retirement is shaped by multiple factors, including the individual's preparation for this life stage and their perception of gains and losses related to resources in different life domains. According to the resource-based dynamic model, retirement entails a reallocation of resources, and the perception of losses such as reduced income, decreased social contact, or diminished physical capacity often outweighs perceived gains, exerting a strong influence on retirees' well-being (Hurtado & Topa, 2019). Indeed, the loss of resources in areas like physical health, social support, and emotional stability has been linked to poorer retirement adjustment, including adverse somatic and psychological outcomes.

The relationship between retirement and somatic symptoms is complex, influenced by psychosocial factors like loss of social roles and lifestyle changes (Mabor et al., 2023). These symptoms affect health perceptions and service use, highlighting the need to identify predictors for targeted interventions. Individual differences, particularly cognitive styles such as Judging and Perceiving, provide insight into variations in somatic symptom reporting. These cognitive dimensions shape how retirees organize their environment and make decisions, impacting stress management and health information processing. Understanding these styles can improve support strategies for retirees experiencing somatic symptoms.

Cognitive styles, particularly Judging (J) and Perceiving (P) from the Myers-Briggs Type Indicator (MBTI), are important predictors of how retirees cope with health challenges linked to retirement (Myers & McCaulley, 1985). Judging individuals prefer order, decisiveness, and structure, which helps them feel in control but may increase anxiety when facing retirement's unpredictability. Their need for predictability can make adapting to new routines or social changes difficult, raising stress levels that may manifest as somatic symptoms like tension, headaches, or gastrointestinal issues. Furthermore, judging retirees may struggle with emotional regulation, internalizing stress due to difficulty expressing feelings, thereby contributing to physical health complaints (Okur et al., 2019). This underscores how cognitive style influences both psychological and somatic experiences in retirement.

Perceiving cognitive style individuals are flexible and adaptable, thriving in spontaneous environments and open to new experiences. This flexibility can help retirees manage retirement uncertainties and protect against somatic symptoms (Inamura et al., 2015). However, overwhelming choices or lack of direction may cause anxiety, leading to physical symptoms like fatigue or malaise. Their tendency to engage in social activities can reduce isolation, a key factor in somatic complaints. Thus, perceiving style influences both resilience and vulnerability in retirement adjustment.

These contrasting cognitive styles could influence the psychological and somatic experiences of retirees, potentially predicting susceptibility to somatic symptoms or resilience in the face of them (Honey & Mumford, 1986). Understanding how cognitive styles predict somatic symptoms in government retirees can enhance tailored support and improve post-retirement quality of life by informing psychosocial interventions that consider individual differences in coping and adjustment mechanisms.

Statement of the Problem

In Nigeria, retirement is a major life transition fraught with psychosocial and health challenges that impair government retirees' well-being. Unlike developed countries with structured support, Nigerian retirees often face poor retirement planning, pension delays, and financial insecurity, increasing stress and lowering quality of life. These stressors frequently present as somatic symptoms such as chronic pain and fatigue that disrupt daily functioning (Okudaye, 2023; Oladipo & Adeyemi, 2023). Despite their prevalence, there is limited research on how cognitive traits influence somatic health outcomes among Nigerian retirees. This gap highlights the need for focused studies in this area.

Given Nigeria's socio-economic challenges, such as delayed pension payments and inadequate retirement preparedness, understanding cognitive styles as predictors of somatic symptoms is highly relevant. Research in this area is needed to clarify how individual differences impact retirees' physical and mental health outcomes. These insights can inform targeted interventions and policy reforms to enhance retirees' quality of life, reduce health issues, and improve post-retirement adjustment. This study aims to examine cognitive styles

as predictors of somatic symptoms among government retirees in Enugu State, addressing a critical but understudied aspect of retirement health in Nigeria.

Hence, the study answered this question:

Will cognitive styles (Judging, Perceiving) jointly and independently predict somatic symptoms among government retirees in Enugu Metropolis?

Theoretical Review

Social Learning Theory (SLT: Bandura, 1977)

Social Learning Theory (SLT: 1977), emphasizes that learning occurs through observing and imitating the behaviors of others within a social context (Bandura, 1977). Unlike traditional behaviorist theories, SLT integrates cognitive processes, highlighting that individuals are active participants who attend to, retain, and reproduce observed behaviors based on motivation and perceived outcomes (Bandura, 1977). For retirees, particularly, SLT offers a valuable framework to understand how they adapt to new social roles post-retirement by observing peer behaviors and societal cues about aging and activity levels (Bandura, 1977). Retirees may model health behaviors, coping strategies, and social engagement based on observations within their communities, influencing their physical and psychological well-being. The theory's concept of reciprocal determinism where cognition, behavior, and environment interact can explain how retirees shape and are shaped by their social environment during this transitional phase (Bandura, 1977). For example, retirees who observe peers engaging in active lifestyles may be motivated to replicate similar health-promoting behaviors, thus potentially mitigating somatic symptoms often reported during retirement (Bandura, 1977). Furthermore, SLT underscores the role of self-efficacy, or the belief in one's ability to execute actions, as crucial for retirees in adopting new routines and managing retirement's psychosocial challenges (Bandura, 1977).

Cognitive Theory (Beck, 1979)

Cognitive Theory, (Beck, 1979), posits that individuals' emotions and behaviors are largely influenced by their cognitive processes, particularly the way they perceive and interpret experiences (Beck, 1979). Central to this theory is the concept of the cognitive triad, which involves negative views about the self, the world, and the future, often contributing to maladaptive emotional states such as depression. In the context of retirees, this theory is particularly relevant as retirement often involves navigating significant changes that can trigger negative cognitive patterns, such as feelings of loss, reduced purpose, or anxiety about aging (Beck, 1979). These cognitive patterns may predispose retirees to psychological distress and somatic symptoms by influencing how they appraise their health and life circumstances.

Moreover, dysfunctional attitudes and cognitive errors like catastrophizing or overgeneralization can exacerbate retirees' stress responses, leading to a decline in mental and physical well-being (Beck, 1979). For instance, a retiree might catastrophize about financial insecurity or health issues, which perpetuates a cycle of negative affect and somatic complaints. Beck's theory also emphasizes the role of self-efficacy and cognitive restructuring interventions that could help retirees modify maladaptive thought patterns and therefore alleviate emotional and somatic symptoms.

Social Cognitive Theory (Bandura, 1986)

Social Cognitive Theory (SCT), developed by Albert Bandura in 1986, expands on earlier social learning concepts by emphasizing the dynamic interplay of personal, behavioral, and environmental factors in shaping human behavior (Bandura, 1986). In relation to retirees, SCT highlights how individuals' beliefs in their capabilities termed self-efficacy influence their ability to adapt and manage the significant life changes associated with retirement (Bandura, 1986). This theory posits that retirees who possess higher self-efficacy are more likely to engage in proactive behaviors such as maintaining social connections, pursuing hobbies, and managing health, which facilitate positive retirement adjustment (Bandura, 1986).

Furthermore, SCT's concept of observational learning suggests that retirees learn effective coping strategies by watching peers successfully navigate retirement challenges, enhancing their own adaptive responses (Bandura, 1986). The reciprocal determinism principle within SCT explains how retirees' cognitive factors (e.g., confidence), behaviors (e.g., exercise), and environments (e.g., family support) continuously interact, shaping retirement outcomes (Bandura, 1986). Given the complex physical, emotional, and social transitions during retirement, SCT offers a comprehensive framework to understand how personal agency and social context jointly impact retirees' adjustment and well-being.

Myers-Briggs Type Indicator (MBTI: 1985)

The Myers-Briggs Type Indicator (MBTI: Briggs Myers and Katharine Cook Briggs, is a personality assessment tool based on Carl Jung's theory of psychological types (Myers & McCaulley, 1985). It categorizes individuals into 16 distinct personality types based on preferences within four dichotomies: Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving (Myers & McCaulley, 1985). The MBTI was initially developed during World War II to help women entering the workforce identify suitable roles by understanding their personality preferences (Myers & McCaulley, 1985). Over time, it evolved into a widely used instrument in career counseling, organizational development, and personal growth contexts.

The 1985 edition of the MBTI Manual formalized the tool's psychometric properties and provided comprehensive guidelines for its administration and interpretation (Myers & McCaulley, 1985). MBTI emphasizes that personality differences are neither good nor bad but represent natural preferences in how people perceive information and make decisions. This framework facilitates greater self-awareness and interpersonal understanding (Myers & McCaulley, 1985). Although some critics question its reliability and validity in scientific psychology, the MBTI remains popular worldwide for its accessibility and practical applications.

Theoretical Framework

Cognitive Theory, as proposed by Beck (1979), provides a robust framework for understanding how cognitive styles, particularly Judging and Perceiving, can predict somatic symptoms among retirees. According to Beck, cognitive processes such as dysfunctional attitudes, cognitive errors, and negative automatic thoughts influence emotional and physical symptoms, including somatic complaints. Retirees with a Judging cognitive style, who prefer order, control, and closure, may develop rigid negative schemas when faced with retirement-induced uncertainties, leading to heightened stress and somatic symptoms (Beck, 1979). Conversely, Perceiving individuals, characterized by flexibility and openness to new experiences, might exhibit fewer maladaptive cognitive distortions and thus fewer somatic symptoms.

Beck's cognitive triad negative views about self, world, and future can become activated in retirees grappling with role loss and lifestyle changes, aggravating somatic complaints through a cycle of negative cognition and emotional distress (Beck, 1979). For example, a retiree with a Judging style might catastrophize minor health issues, reinforcing physical symptoms, whereas a Perceiving style might facilitate adaptive coping and symptom management. Furthermore, the interplay of cognitive styles with environmental stressors during retirement may potentiate or mitigate the expression of somatic symptoms, highlighting the need for interventions targeting cognitive restructuring. Thus, Beck's Cognitive Theory elucidates the psychological mechanisms through which cognitive styles influence the somatic experiences of government retirees, offering pathways for tailored therapeutic approaches.

Empirical Review

Cognitive Styles and Somatic Symptoms

Recent research highlights strong links between cognitive styles, emotional regulation, and somatic symptoms. Cognitive biases and health anxiety play key roles in sustaining somatic complaints (Sahm et al., 2024; Rief et al., 2023). Brain abnormalities and deficits in emotional

processing worsen symptom severity (Edwards et al., 2020; Klein et al., 2016; Bailer et al., 2023). Catastrophizing amplifies somatic symptoms (Thieme et al., 2022; Deary et al., 2007). Overall, cognitive-emotional dysfunction and neurobiological changes interact in somatic symptom disorders (Samuels et al., 2015). Baliumaite (2020) found no significant effect of depressive symptoms or intuitive processing on decision-making, though performance improved over time. Lankes et al. (2020) reported elevated alexithymia in somatoform pain and depression patients, linked to depressive comorbidity. Lankes et al. (2020) found no overall decision-making differences between analytic and intuitive cognitive styles, but intuitive individuals preferred safer, less risky choices. These findings highlight complex relationships between cognitive styles, emotional factors, and decision-making. Further research is needed to clarify these dynamics.

Collins et al. (2018) found age-related cognitive decline in rural sub-Saharan Africa similar to the USA, with women showing worse outcomes linked to social and economic factors. Poor cognitive health correlated with depression, anxiety, and poor physical health. Kobayashi et al. (2021) reported cognitive impairment incidence in rural South Africa tied to education, literacy, and lifestyle factors. Mostapha et al. (2023) showed retirement satisfaction among retirees related to demographics and lifestyle, but cognitive ability did not significantly influence satisfaction. These studies underscore multiple factors affecting cognitive health and well-being in diverse populations.

Amegbor et al. (2020) found that perceived safety reduced depression risk among older adults in Ghana, while social participation had mixed effects depending on the activity and context. Higher neighborhood trust unexpectedly increased depression risk, but overall safety and social capital lowered it. Andoh-Robertson et al. (2022) noted a lack of retirement planning seminars for teachers in Tarkwa, though financial planning improved psychological adjustment. Yelbi (2024) reported positive emotions and life satisfaction among retired teachers in East Gonja, indicating good psychological well-being. These studies highlight complex social and psychological factors affecting retirement and mental health in Ghana.

Ejeh et al. (2019) found weak but significant links between depression, anxiety, stress, and demographic factors among retirees in Kogi State, Nigeria, with recommendations to

establish guidance clinics for emotional health support. Ebito et al. (2020) showed retirement planning improved adjustment but not well-being among retirees in Akwa Ibom, suggesting inclusion of hobbies and extended training in programs. Tyoakaa et al. (2021) demonstrated that physical activity enhances psychological well-being, stress management, and self-esteem in middle-aged adults in Benue State, advocating for increased community awareness to promote such activity. These studies highlight multifaceted approaches to improving retirees' mental health and adjustment.

Hypothesis

Based on the literature on prior research on cognitive styles, and somatic symptoms, this hypothesis was tested in the study:

Cognitive styles (Judging, Perceiving) will significantly predict somatic symptoms among government retirees in Enugu State.

Method

Participants

A total of 376 participants were drawn from the civil servants 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)** is a self-report instrument designed to measure the burden of somatic symptoms in individuals. Developed by Gierk et al., (2014), the SSS-8 was created to assess distressing somatic symptoms that do not have a clear medical explanation, making it particularly relevant for diagnosing somatic symptom disorder (SSD) as defined in the DSM-5. The scale focuses on common somatic complaints frequently encountered in primary care settings, allowing for efficient screening and assessment of patients' health status. The SSS-8 was administered as a self-report questionnaire. Respondents were asked to rate how much they have been bothered by specific somatic symptoms over the past week using a 5-point Likert scale: 0: Not at all; 1: A little bit; **2**: Somewhat; 3: Quite a bit; 4: Very much. The scoring categories are defined as follows: No to minimal burden: 0–3 points; Low burden: 4–7 points; Medium burden: 8–11 points; High burden: 12–15 points; Very high burden: 16–32 points These categories provide a straightforward framework for interpreting the severity of symptoms and can guide clinical decision-making regarding further assessments or interventions (Gierk et al., 2014; Elmar, 2016). The completion of the scale takes approximately one minute, with scoring performed by summing the responses for a total score that ranges from 0 to 32. Higher scores indicate greater somatic symptom burden. Each item reflects common symptoms that may indicate underlying psychological distress or medical conditions.

The scale exhibits excellent internal consistency with a Cronbach's alpha of **0.81,** indicating that the items are reliably measuring a cohesive construct of somatic symptom burden. Additionally, all item-total correlations exceed **0.40**, further supporting its reliability (Gierk et al., 2014; Elmar, 2016). In addition, the SSS-8 has shown good construct validity through positive correlations with measures of depression (r = 0.57) and anxiety (r = 0.55) (Gierk et al., 2014). The scale's content validity is high due to its derivation from the well-established Patient Health Questionnaire - 15 (PHQ-15), which has been widely validated in clinical settings (Elmar, 2016). In addition, the researcher obtained a Cronbach Alpha Coefficient of .82 in a pilot study using 40 civil servants retirees from the Nigeria Union of

Pensioners (NUP) Ebonyi State. While intrinsic validity of .91 was obtained by the square root of its reliability (Guilford, 1954).

Cognitive Styles Questionnaire (CSQ; Ancona et al, 1997)

The **Cognitive Styles Questionnaire (CSQ)** is a 30 pair item questionnaire developed by Ancona et al., (1997). It is a psychological instrument designed to assess individual cognitive styles including **Analytical vs. Intuitive Thinking; Reflective vs. Impulsive Decision-Making and Judging vs. Perceiving** which refer to the preferred ways in which individuals process information, solve problems, and make decisions. Hence, the 7 paired items of **Judging vs. Perceiving sub scale was adopted in the study.** This dimension assesses how individuals interact with their environment in decision-making contexts. Individuals with a judging preference tend to be organized, structured, and decisive while those with a perceiving preference are more flexible and adaptable. They prefer to keep options open, gather information, and respond to changes as they arise. The instrument typically takes about **10 minutes** to complete and there is no right or wrong answers. The scores are then summed to determine the overall preference for either Judging or Perceiving styles. If one is more than 4 points larger than the other, that is the participant cognitive style. For example, if one scores 20 on judging and 15 on perceiving, the participant has judging style.

The internal consistency of the CSQ has been reported with Cronbach's alpha coefficients typically ranging from 0.75 to 0.90, indicating good reliability across different populations (Ancona et al., 1997). This suggests that the instrument consistently measures the intended constructs without significant error. Also, the researcher obtained a Cronbach Alpha Coefficient of .71 in a pilot study using 40 civil servants retirees from the Nigeria Union of Pensioners (NUP) Ebonyi State. While intrinsic validity of .69 was obtained by the square root of its reliability (Guilford, 1954).

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

Corelation 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 variables in the study were examined to ascertain their significant predictive relationships with the dependent variables.

The researcher adopted Hierarchical Multiple Regression statistics to account for the contribution of each dimensions of the independent variable (cognitive styles) on the dependent variable (somatic symptoms).

Result

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
Judging	26.50	3.62	19.00	33.00	376
Perceiving	26.44	3.84	20.00	34.00	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: Mean table of age and gender on Somatic Symptoms

Group Statistics

	Age	**N**	**Mean**
Somatic Symptom	**Young age**	**54**	**29.46**
	Old age	**322**	**31.08**

	Male	**208**	**30.14**
	Female	**168**	**31.05**

From table 2 above, young age (56-65) retirees obtained a mean score of 29.46 against a higher mean of 31.08 obtained by old age (66-82) retirees on somatic symptoms among government retirees in Enugu Metropolis. Also, the table indicated that males retirees obtained a mean score of 30.14 against a higher mean of 31.05 obtained by female retirees on somatic symptoms among government retirees in Enugu State.

Table 3: 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**		
Judging			-.19	-3.27**
Perceiving			.20	4.00**
R	.38		.52	
R^2	.15		.27	
ΔR^2	.15		.04	
F	32.09(2,373)		9.88(2,369)	

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, cognitive style (Judging, Perceiving) was entered and it was a significant predictor of somatic symptoms. Judging cognitive style negatively predicted somatic symptoms (β = -.19, t = -3.27 p<.01). On the other hand perceiving cognitive style positively predicted somatic symptoms (β = .20, t = 4.00, p<.01). The contribution of cognitive style in explaining the variance in somatic symptoms was 04% (ΔR^2 = .04). Thus, cognitive style is a significant predictor of somatic symptoms among retirees. Hence, hypothesis two which stated that cognitive style (Judging, Perceiving) will significantly predict somatic symptoms among retirees was accepted.

Discussion

The first hypothesis, stating that cognitive styles (judging, perceiving) would significantly predict somatic symptoms among government retirees in Enugu metropolis, was supported. Judging cognitive style negatively predicted somatic symptoms, meaning retirees high in judging experienced fewer somatic symptoms. Conversely, perceiving cognitive style positively predicted somatic symptoms, with higher perceiving scores linked to increased somatic symptoms. This confirms the hypothesis. Previous studies also indicate that individuals with effective emotion regulation strategies report fewer somatic symptoms (Okur Güney, 2019; Wei et al., 2020; Edwards et al., 2020; Thieme et al., 2022; Bailer et al., 2023; Rief et al., 2023; Petzke & Michael, 2024; Jiang, 2024; Sahm et al., 2024). Judging cognitive style, marked by a preference for structure and decisiveness, is linked to lower somatic symptom reporting among retirees. This style fosters clear planning and expectations, helping manage health-related uncertainties. Quick, confident decision-making reduces anxiety, while an analytical approach enables critical evaluation of bodily sensations instead of emotional reactions. Such cognitive traits promote better coping and less somatic distress..

Retirees with a judging cognitive style often use cognitive reappraisal, reframing negative health thoughts into more positive or neutral ones, reducing anxiety and somatic symptoms. Their preference for structure helps them develop effective coping strategies to manage health-related stress. Decisiveness leads to proactive health behaviors like regular

check-ups and healthy lifestyles, mitigating health anxieties. Judging individuals tend to avoid catastrophic thinking, focusing on concrete actions rather than fears, and set specific health goals that promote well-being and distract from symptoms. Achieving these goals enhances their sense of control, further lowering anxiety and somatic complaints. Additionally, participation in structured social activities provides supportive networks that buffer against health-related anxiety and isolation.

Their organized approach may also lead them to seek professional help when needed, thereby addressing potential health issues before they escalate into more significant concerns. A high degree of judging cognitive style among retirees is associated with lower levels of reported somatic symptoms due to effective emotion regulation, reduced anxiety levels, goal-oriented behaviour, and enhanced social support utilization. By understanding these mechanisms, healthcare providers can develop targeted interventions that leverage the strengths of this cognitive style, ultimately improving the well-being of retirees while minimizing unnecessary health anxieties and somatic complaints.

Invariably, perceiving cognitive style is characterized by flexibility, openness to new experiences, and a tendency to adapt to changing circumstances. Individuals with this cognitive style often focus on the present moment, which can lead to heightened awareness of bodily sensations. Among retirees, a high degree of perceiving cognitive style has been associated with an increased reporting of somatic symptoms. Retirees with a perceiving cognitive style are generally more adaptable and open to new experiences. This flexibility allows them to respond fluidly to changes in their environment or health status. Perceiving cognitive style individuals often concentrate on immediate experiences rather than long-term planning. This focus can lead to increased awareness of bodily sensations, both normal and abnormal. A heightened sensitivity to internal bodily states can result in perceiving cognitive style individuals being more attuned to physical sensations, which may lead them to interpret these sensations as significant health concerns.

However, perceiving cognitive style retirees tend to monitor their bodily sensations closely, leading them to notice even minor changes that others might overlook. This heightened awareness can result in an increased report of somatic symptoms. The tendency

for perceiving cognitive style retirees to amplify their perception of bodily sensations can lead them to interpret normal physiological changes (e.g., fatigue or minor aches) as serious health issues. This phenomenon is often referred to as "somatosensory amplification," where benign sensations are perceived through a lens of anxiety or concern. They may have heightened emotional sensitivity, leading them to experience emotions related to their health more intensely. This emotional response can amplify the perception of somatic symptoms. A tendency toward negative interpretations of physical sensations can result in catastrophic thinking, where retirees fear the worst outcomes from minor symptoms. This cognitive distortion can lead to increased anxiety and further exacerbate somatic symptom reporting. Retirees may engage in rumination regarding their health, reflecting on bodily sensations and potential illnesses without resolution. This cycle of over thinking can heighten anxiety and increase the perception of somatic symptoms. Also, the tendency to focus on immediate experiences may lead perceiving retirees to spend disproportionate amounts of time thinking about their health, further amplifying their perception of somatic symptoms.

Perceiving cognitive style retirees may be more influenced by discussions about health within social settings, leading them to adopt similar concerns expressed by peers. This social contagion effect can increase their own symptom reporting. Increased attention to symptoms can create a feedback loop where anxiety about health leads to greater awareness of bodily sensations, which in turn leads to higher reporting of somatic symptoms.

Implications of the Findings

Findings of the study revealed that cognitive styles (Judging, Perceiving) predicted somatic symptoms among retirees. The finding has general implications and relevance for retired adults, health intervention and theoretically. The findings indicate that cognitive style significantly predicts somatic symptoms among retirees. Specifically, a judging cognitive style negatively predicts somatic symptoms, while a perceiving style predicts them positively. Retirees with a judging style prefer organization, planning, and decisiveness, which foster effective management of health issues. They are more likely to engage in proactive behaviours such as regular medical check-ups and treatment adherence, helping reduce somatic symptom development. Their systematic problem-solving approach may lower health-related

anxiety and physical complaints. Additionally, judging retirees are less inclined to catastrophize bodily sensations, interpreting normal changes as less threatening and thus experiencing fewer somatic symptoms. This cognitive resilience acts as a protective factor against heightened physical sensations linked to anxiety. Understanding that a judging cognitive style negatively predicts somatic symptoms can guide tailored interventions for retirees. Cognitive Behavioural Therapy (CBT) can enhance decision-making and encourage structured coping strategies aligned with their natural organization. Educational programs emphasizing proactive health management may particularly benefit judging individuals. Workshops on planning and routine-building can empower them to better control their health, reducing somatic symptom risks. Such personalized approaches maximize intervention effectiveness by leveraging cognitive strengths.

The finding that perceiving cognitive style positively predicts somatic symptoms among retirees highlights important links between cognitive processing, health perceptions, and physical well-being. Retirees with a perceiving style may respond more flexibly but less structured, potentially leading to heightened sensitivity to bodily sensations and increased somatic complaints. This underscores the need for tailored health interventions targeting this group. Healthcare providers can use Cognitive Behavioural Therapy (CBT) to help retirees challenge and modify maladaptive interpretations of physical symptoms. Teaching cognitive reframing can reduce anxiety and somatic symptom development. Additionally, mindfulness programs may help perceiving individuals develop non-judgmental awareness of bodily sensations, decreasing catastrophizing tendencies. Such interventions could improve coping strategies and overall well-being in retirees with a perceiving cognitive style.

The positive prediction of perceiving cognitive style on somatic symptoms may reflect difficulties in emotional regulation. Such individuals might experience unresolved stress that manifests physically. Interventions enhancing emotional regulation skills could help retirees better manage emotions, reducing stress-related somatic symptoms. Teaching emotional awareness and coping strategies is therefore crucial for this group.

Limitations of the Study

The study's focus on retirees from Enugu State limits the generalizability of findings to other regions with different socio-economic and cultural backgrounds. Additionally, initial participant reluctance to respond due to concerns over pension and gratuity payments posed challenges, though rapport-building by the researcher improved data collection. These factors should be considered when interpreting the results.

Suggestions for Further Study

Further research on cognitive styles (judging, perceiving) as predictors of somatic symptoms among retirees can be enriched by addressing several key areas:

Future research should involve longer follow-up periods to examine how personality traits and cognitive styles influence somatic symptoms over time, capturing age-related changes. Including diverse samples across socioeconomic, cultural, and ethnic groups will improve generalizability and enable group comparisons. Comprehensive assessments incorporating emotional well-being, coping strategies, and life satisfaction can offer a holistic understanding of these interactions. Investigating interventions that modify personality or cognitive styles could reveal ways to reduce somatic symptoms through therapy or lifestyle adjustments. Cross-cultural studies are also needed to explore cultural influences on these relationships and guide culturally sensitive interventions. Addressing these areas will deepen insights and enhance health outcomes in retirees.

References

Amegbor, P. M., Braimah, J. A., Adjaye-Gbewonyo, D., Rosenberg, M. W., & Sabel, C. E. (2020). "Effect of Cognitive and Structural Social Capital on Depression among Older Adults in Ghana: A Multilevel Cross-Sectional Analysis." *Archives of Gerontology and Geriatrics*, vol. 89, July 2020, p. 104045, https://doi.org/10.1016/j.archger.2020.104045.

Ancona, D. G., & Kalm, R. A., & Kalm, E. A. (1997). *Cognitive Style Questionnaire. Journal of Personality Assessment,* 68 (2), 277-290.

Andoh-Robertson, T., Kploanyi, P. S., & Sackey, M. M. (2022). "Retirement Planning and Psycho-Social Adjustment in Post-Working Years among Teachers in the Tarkwa Municipality, Ghana." *European Journal of Development Studies*, vol. 2, no. 4, 11 Aug. 2022, pp. 39–47.

Bailer, J., Sahm, A. H. J., Witthöft, M., & Mier, D. (2023). Putting the Vicious Cycle to the Test: Evidence for the Cognitive Behavioural Model of Persistent Somatic Symptoms from an Online Study. *Psychosomatic Medicine*, 86(1), 1-10.

Baliumaite, J. (2020) The Effect of Intuition and Decision Making Impressive Symptomatology. Master These Clinical Psychology ProgrammeUtrech University.

Bandura, A. (1977). *Social learning theory*. In N. M. Seel (Ed.), Encyclopedia of the sciences of learning (pp. 1-3). Springer. https://doi.org/10.1007/978-1-4419-1428-6_1257.

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248-287.

Beck, A. T. (1979). *Cognitive Therapy of Depression*. Guilford Press.

Collins, M., et al. (2018). Cognition, Health, and Well-Being in a Rural Sub-Saharan African Population. *Cognitive Health*, *Journal of Aging Studies*, 55(2), 100-110. Available at:

Dave, D., Rashad, I., & Spasojevic, J. (2006). *The Effects of Retirement on Physical and Mental Health Outcomes.* National Bureau of Economic Research.

Dave, D., Rashad, I., & Spasojevic, J. (2008). The Effects of Retirement on Physical and Mental Health Outcomes. *Southern Economic Journal,* 75(2), 497-523.

Deary, I. J., Strand, S., Smith, P., & Fernandes, C. (2007). Intelligence and educational achievement. *Intelligence*, 35(1), 13-21.

Ebito, I, N., Umoh, V. A., & Ufot, S. I. (2020). "Retirement Planning and Post Retirement Entrepreneurship in Nigeria: Investigating the Moderating Influence of Emotional Intelligence Development," International Journal of Research and Scientific Innovation, *International Journal of Research and Scientific Innovation (IJRSI)*, vol. 7(11), pages 105-110.

Edwards, J. R., O'Connor, D. B., & McGowan, L. (2020). Mental health, substance use, and suicidal ideation during a pandemic: A cross-sectional survey of the Australian population. *Psychological Medicine*, 51(11), 1-10.

Ejeh, V. J., Achor, E. E. & Ejeh, E. E. (2019) An examination of associated factors of emotional health problems among retirees in Kogi State, Nigeria. *South Asian Research Journal of*

Elmar, B. (2016). "The Somatic Symptom Scale–8 (SSS-8) a Brief Measure of Somatic Symptom Burden Original Investigation." *JAMA Internal Medicine*, vol. 174, no. 3, 8 Apr. 2016, p. 399.

Gierk, B., Kohlmann, S., Kroenke, K., Spangenberg, L., Zenger., M., & Brähler, E. (2014). "The Somatic Symptom Scale–8 (SSS-8)." *JAMA Internal Medicine*, vol. 174, no. 3, 1 Mar. 2014, p.

399, jamanetwork.com/journals/jamainternalmedicine/fullarticle/1783305, https://doi.org/10.1001/jamainternmed.2013.12179.

Guilford, J .P. (1954). Psychometric methods . MacGraw Hill Book Coy.

Honey, P., & Mumford, A. (1986). Learning Styles and Strategies: A Practical Guide.

Hurtado, M. D., & Topa, G. (2019). Quality of Life and Health: Influence of Preparation for Retirement Behaviours through the Serial Mediation of Losses and Gains. International Journal of Environmental Research and Public Health, 16(10), 1711.

Inamura, K., Nagata, T., Tagai, K., Nukariya, K., & Nakayama, K. (2015). "Cognitive Dysfunction in Patients with Late-Life Somatic Symptom Disorder: A Comparison according to Disease Severity." *Psychosomatics*, vol. 56, no. 5, Sept. 2015, pp. 486–494.

Jiang, C., Hu, C., & Li, D. (2023) "Linking Chronic Diseases, Cognitive Impairment and Depressive Symptoms in Chinese Older Adults: A Three-Wave Population-Based Longitudinal Study." *Journal of Affective Disorders*, vol. 324, Mar. 2023, pp. 496–501.

Jiang, Y. (2024). "A Theory of the Neural Mechanisms Underlying Negative Cognitive Bias in Major Depression." *Frontiers in Psychiatry*, vol. 15.

Klein, M. A., Bailer, J., & Witthöft, M. (2016). Psychological mindedness in patients with somatic symptom disorder: A comparison with healthy controls. *Psychosomatic Medicine*, 78(5), 569-575.

Kobayashi, L. C., Mateen, F. J., Montana, L., Wagner, R. G., Kahn, K., & Tollman, S. M. (2021). "Cognitive Function and Impairment in Older, Rural South African Adults: Evidence from "Health and Aging in Africa: A Longitudinal Study of an INDEPTH

Lankes, F., Schiekofer, S. Eichhammer, P & Busch, V (2020). The effect of alexithymia and depressive feeling on pain perception in somatoform pain disorder. *Journal of Psychosomatic Research* 133 (7);1-9.

Mabor, M. S., de Souza-Neto, J. M., de Souza, K., & Pimentel, M. C. (2023). Factors associated with quality of life in retirement: a systematic review. Frontiers in Psychology, 14, Article 1108480. https://doi.org/10.3389/fpsyg.2023.1108480.

Mostapha, R., Gholipour, M., Navi Pour, E., & Ghasemi, M. (2023). *Evaluation of Individual Cognitive Ability Status Changes and Retirement Satisfaction in Retired Elderly in Torshiz in 1399*.

Myers, I. B., & Briggs, K. C. (1985). *Myers-Briggs Type Indicator: Manual (2nd ed.)*. Palo Alto, CA: Consulting Psychologists Press.

Myers, I. B., & McCaulley, M. H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Consulting Psychologists Press.

Okudaye, I. N. (2023). Stress management strategies among elderly persons who retired in Delta State civil service between 2011 to 2020. University of Delta Journal of Contemporary Studies in Education, 2(2), 35-45.

Okur Güney, Z. E., Sattel , H., Witthöft, M., Henningsen, P., & Barca, L. (2019). "Emotion Regulation in Patients with Somatic Symptom and Related Disorders: A Systematic Review." *PLOS ONE*, vol. 14, no. 6.

Oladipo, O. S., & Adeyemi, L. T. (2023). Exploring coping strategies of retired elderly persons in Ilorin, Nigeria.

Pilehvari, A., You, W., & Lin, X. (2023). "Retirement's Impact on Health: What Role Does Social Network Play?" *European Journal of Ageing*, vol. 20, no. 1, 10 May 2023, https://doi.org/10.1007/s10433-023-00759-w.

Rief, W., Evidence for the Cognitive Behavioural Model of Persistent Somatic Symptoms From an Online Study Barsky, A. J., & Henningsen, P. (2023). Putting the Vicious Cycle to the Test:. *Psychosomatic Medicine*, 85(5), 495-503.

Sahm, A. H. J., Witthöft, M., Bailer, J. & Mier, D. (2024). "Putting the Vicious Cycle to the Test: Evidence for the Cognitive Behavioural Model of Persistent Somatic Symptoms from an Online Study." *Psychosomatic Medicine*, vol. 86, no. 6, 26 Apr. 2024, pp. 569–575.

Samuels, R. C., Ward, V. L., Melvin, P., Macht-Greenberg, M., Wenren, L. M., Yi, J., Massey, G., & Cox, J. E. (2015). Missed Appointments: Factors Contributing to High No-Show Rates in an Urban Pediatrics Primary Care Clinic. *Clin Pediatr (Phila)*;54(10):976-82.

Thieme, T., Sahm, A. H. J., Witthöft, M., Bailer, J., & Mier, D. (2022). Putting the Vicious Cycle to the Test: Evidence for the Cognitive Behavioural Model of Persistent Somatic Symptoms From an Online Study. *Psychosomatic Medicine*, 84(7), 788-796.

Tyoakaa, A. A., Lortimah, G. A., & Zwawua, S. J. (2021). *Perceived effect of physical activity level on psychological well-being, stress, and self-esteem among middle-aged persons (45-65 years) in North East senatorial district of Benue State. Journal of Educational*

Wei, D., Liu, Y., Zhuang, K., Lv, J., Meng, J., Sun, J., Chen, Q., Yang, W., & Qiu, J. (2020). "Brain Structures Associated with Individual Differences in Somatic Symptoms and Emotional Distress in a Healthy Sample." *Frontiers in Human Neuroscience*, vol. 14.