

FINANCIAL STRESS AND PERSONALITY TRAITS AS PREDICTORS OF PSYCHOLOGICAL DISTRESS AMONG CAREGIVERS OF MENTALLY ILL PATIENTS

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Abstract

This study examined financial stress and personality traits as predictors of psychological distress among caregivers of mentally ill patients at Neuropsychiatric Hospital, Nawfia, Anambra State, Nigeria. Eighty-nine caregivers were recruited using a total population sampling technique (31 males, 34.8%; 58 females, 65.2%), with ages ranging from 24 to 51 years ($M = 39.63$, $SD = 8.96$). Instruments included the Kessler Psychological Distress Scale (K10), a Financial Stress Questionnaire, and the Big Five Personality Inventory. A predictive cross-sectional design was employed, and data were analyzed using multiple linear regression. The results indicated that the affective dimension of financial stress significantly and positively predicted psychological distress ($\beta = 1.19$, $t = 7.39$, $p < .05$). Other financial stress dimensions demonstrated negative but non-significant relationships. None of the Big Five personality traits significantly predicted psychological distress in this sample. The findings underscore the salience of financial strain in shaping caregivers' psychological well-being, while suggesting that personality traits may play a less direct role within this context. It is recommended that mental health institutions incorporate structured financial counseling and psychosocial support services to mitigate distress among caregivers.

Keywords: financial stress, personality traits, psychological distress, caregivers, mental illness

Introduction

Caregiving for individuals with severe mental illness is widely recognised as a psychologically demanding role. Family caregivers frequently confront emotional strain, social stigma, financial burden, disruption of occupational functioning and limited systemic support. Sustained exposure to these stressors places caregivers at elevated risk for burnout, anxiety, depressive symptoms and broader psychological distress. Empirical evidence consistently indicates that caregivers of persons with mental illness experience significantly higher levels of distress compared with non-caregivers and even caregivers of individuals with certain physical conditions (World Health Organization, 2022).

Psychological distress refers to a state of emotional suffering characterised primarily by symptoms of depression and anxiety, often accompanied by somatic complaints such as insomnia, fatigue and impaired concentration (Anyaorah et al., 2023). Conceptually, it reflects a non-specific yet clinically meaningful constellation of affective and cognitive symptoms that signal compromised mental well-being (Drapeau et al., 2012). The Kessler Psychological Distress framework developed by Kessler et al., (2002) conceptualises distress as a dimensional construct capturing varying levels of anxiety–depressive symptomatology in community populations (Kessler et al., 2002). Within caregiving contexts, psychological distress may impair cognitive functioning, reduce caregiving efficiency and diminish overall quality of life.

Caregivers of individuals with chronic psychiatric disorders often encounter prolonged economic strain. Mental illnesses such as schizophrenia, bipolar disorder and severe depressive disorders frequently require long-term treatment, repeated hospitalisations and continuous medication, all of which generate substantial financial costs. In low- and middle-income countries, where health insurance coverage may be limited, families often bear the majority of treatment expenses (World Bank, 2023). Financial stress, defined as the perceived inability to meet financial obligations or maintain economic stability, has been robustly linked to adverse mental health outcomes, including depression, anxiety and diminished life satisfaction (Sweet et al., 2013; French & Vigne, 2019).

The Family Stress Model articulated by Conger et al., (1994) provides a useful theoretical lens for understanding this relationship. The model posits that economic pressure generates emotional distress, which in turn disrupts psychological functioning and relational processes. Applied to caregiving, persistent financial strain may heighten emotional vulnerability, reduce coping capacity and increase psychological morbidity. Recent systematic reviews confirm that financial hardship remains a significant predictor of psychological distress across diverse populations, particularly in contexts of chronic caregiving (Richardson et al., 2022).

In addition to contextual stressors, individual differences in personality may shape how caregivers perceive and respond to financial and caregiving demands. Personality traits, most comprehensively organised within the Five-Factor Model proposed by Costa and McCrae (1992), represent enduring patterns of emotional, cognitive and behavioural tendencies. The five broad dimensions—Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness to Experience—have been consistently associated with mental health outcomes. Of particular relevance, Neuroticism has been positively associated with psychological distress, whereas Extraversion and Conscientiousness tend to demonstrate protective associations (Bleidorn et al., 2019).

The Stress–Diathesis Model further explains how personality traits may interact with environmental stressors to influence psychological outcomes. According to this model, dispositional vulnerabilities such as high Neuroticism may predispose individuals to heightened emotional reactivity under stress, thereby increasing the likelihood of psychological distress (Ingram & Luxton, 2005). Conversely, traits such as Conscientiousness and Agreeableness may facilitate adaptive coping and social support mobilisation. Nonetheless, findings regarding the predictive strength of personality traits in caregiving contexts remain inconsistent, particularly within African settings.

In Nigeria, research examining caregivers’ psychological well-being has expanded in recent years; however, empirical integration of financial stress and personality traits as joint predictors of psychological distress remains limited. Existing studies have largely examined caregiver burden, depression or anxiety in isolation, without systematically exploring the interplay between economic strain and dispositional characteristics. This gap is especially pertinent in Anambra State, where socioeconomic pressures may intensify caregiving challenges.

Given the chronic nature of many psychiatric disorders and the substantial financial responsibilities placed upon families, it is plausible that financial stress constitutes a primary driver of psychological distress among caregivers. At the same time, personality traits may influence how caregivers appraise and cope with economic and caregiving demands. Therefore, the present study sought to investigate the predictive roles of financial stress and personality traits on psychological distress among caregivers of mentally ill patients attending Neuropsychiatric Hospital, Nawfia. By integrating contextual (financial stress) and dispositional (personality traits) variables within a single predictive model, this study contributes to a more comprehensive understanding of caregiver mental health within a Nigerian clinical context.

Theoretical framework

This work was theoretically anchored on Transactional Model of Stress and Coping developed by Lazarus and Folkman (1984). According to Lazarus and Folkman (1984), stress is not simply a result of external events, but a product of the interaction between the individual and the environment. The model proposes two key processes: primary appraisal and secondary appraisal. In primary appraisal, individuals evaluate whether a situation is threatening, harmful, or challenging. In secondary appraisal, they assess whether they have the resources (emotional, financial, social, or psychological) to cope with the situation. In the context of caregivers of persons with mental illness, financial strain (e.g., cost of treatment, medication, transportation, and reduced work productivity) may be appraised as a significant threat. When caregivers perceive that their financial resources are insufficient, the imbalance between demands and coping resources can lead to psychological distress, including anxiety, depression, and emotional exhaustion.

Personality traits influence how caregivers interpret and respond to financial stress. For example, individuals high in neuroticism may appraise caregiving demands as more threatening and feel less capable of coping, thereby increasing vulnerability to distress. Conversely, traits such as conscientiousness or emotional stability may enhance effective coping strategies and resilience. Thus, personality shapes both appraisal and coping responses, moderating the impact of financial stress on psychological well-being. Therefore, the Transactional Model provides a strong theoretical explanation for why financial stress (environmental demand) and personality traits (individual differences) jointly predict psychological distress among caregivers of mentally ill individuals. It emphasizes that distress arises not merely from financial hardship itself, but from how caregivers perceive and cope with that hardship.

Hypotheses

1. Financial stress will significantly predict psychological distress among caregivers of mental illness patients.
2. Personality traits will significantly predict psychological distress among caregivers of mental illness patients.

Methods

This described participants, instrument, procedure, design and statistics that were used in the study.

Participants

A total of eighty-nine (89) participants who are relatives of mentally ill patients in Neuro-Psychiatric Hospital Nawfia Anambra State were used for the study. They consist of 31(34.8%) males and 58(65.2%) females. Their age ranged from 24 to 51 years with the age mean of 39.63 and standard deviation of 8.96. Their educational level shows that 36(40.4%) had bachelors degree (B sc) certificate, 23(25.8%) had higher diploma degree (HND) certificate, 15(16.9%) had national diploma (OND) certificate, 15(16.9%) had senior secondary school certificate (SSCE). Their marital status shows that 38(42.78%) were married, 22(24.7%) were unmarried, and 29(32.6%) were separated. Non-probability sampling technique (purposive sampling technique) was used to select the participants.

Instruments

Three instruments were used for the study: Financial Stress Questionnaire, Big Five Personality Inventory and Kessler (K10) Psychological Distress Scale.

Financial Stress Scale by Heo, Cho and Lee (2020)

The instrument contained 24 items designed to measure psychophysiological response to the perception of imbalance, uncertainty, and risk in the realm of financial resource management and decision making. The scale responses measure on a 5-point Likert scale that ranged from 1=*Strongly Disagree* to 5=*Strongly Agree*.

Big Five Personality Inventory (BFI)

The Big Five Personality Inventory (BFI) by John, Donahue and Kentle (1991) was used in this study to measure the Big Five personality dimensions. The (BFI) is a questionnaire with 44 items. The 44 item inventory is one of the six psychological instruments which assess personality from a five-dimensional perspective. The 5 dimension or subscales or BFI are Extraversion, Agreeableness, conscientiousness, Neuroticism and openness. It has a response format of 1=Disagree strongly, 2= Disagree a little, 3= Neither agree nor disagree, 4=Agree a little, and 5= Agree strongly. The scale has a Crombach alpha co-efficient of .80 and a test re-test reliability of .85 on 3months interval as reported by John e. al., (1991).

Kessler (K10) Psychological Distress Scale

Psychological distress was assessed using adapted version of Kessler Psychological Distress Scale (K10). Kessler Psychological Distress Scale is a 10-item self-report inventory developed by Kessler (2001). The instrument is on a five point Likert scale which requires the respondents to rate how often they experience certain symptoms related to distress.

Procedure

The researcher recruited relatives of the mentally ill patients in Nawfia Neuro Psychiatric hospital with three nurses to serve as research assistants that help her administered the instruments. The researcher and assistants after securing the management approval, researcher and the assistants met the participants and explained the nature of the study to the health caregiver, and the right they have to withdraw from the study if they feel otherwise. Total of 100 questionnaires were distributed, but 89 appropriately answered.

Design and Statistics

The study adopted cross sectional and correlational design for the study because the objective of the study is to establish the relationships that exist between the study variables (financial stress, personality and psychological distress). Multiple Linear Regression analysis was used in testing the predictive effect of the variables in the study (financial stress, personality and psychological distress). The study adopted the statistics because it allows analyzing the relationship of multiple independent variables in regards to the dependent variable and consequently builds a model of the relationship between variables. Thus, this method suits this study well and makes it possible to test the hypotheses.

Result

This chapter presented: Descriptive, zero order matrix coefficient, and multiple linear regressions statistics offinancial stress, personality and psychological distress.

Table 1: Descriptive and Zero Order Matrix Coefficient Statistics of Financial stress, Personality and Psychological Distress

Sources	Mean	Std. D	Psy. D	A.FS	R.FS	Phy. FS	Ext.	Agre.	Cons.	Neuro.	Open
Psy. Distress	25.97	6.53	1.00								
Affection FS	19.29	3.60	.34*	1.00							
Relational FS	19.88	3.78	.01	.81*	1.00						
Physiology Re. FS	18.22	3.29	-.01	.77*	.74*	1.00					
Extraversion	26.30	4.96	.04	-.01	-.07	.01	1.00				
Agreeableness	28.91	5.32	-.03	-.07	-.07	-.06	.26*	1.00			
Conscientiousness	29.53	5.69	-.05	.06	.01	.07	.26*	.43*	1.00		
Neuroticism	21.54	3.98	.05	.04	-.01	.06	.34*	.42*	.54*	1.00	
Open to exp.	36.64	7.50	-.14	-.12	-.13	-.03	.43*	.34*	.378	.29*	1.00

Results from table 1, showed that affection dimension of financial stress had positive relationship with psychological distress at $r(N= 89)$, $.34$, $p<.05$ (M: 19.29, SD: 3.60). Relational/interpersonal dimension of financial stress had no relationship with psychological distress at $r(N= 89)$, $.01$, $p>.05$ (M: 19.88, SD: 3.78). Physiology response dimension of financial stress had no relationship with psychological distress at $r(N= 89)$, $-.01$, $p>.05$ (M: 18.22, SD: 3.29).

Extraversion personality trait had no relationship with psychological distress at $r(N= 89)$, $.04$, $p>.05$ (M: 26.30, SD: 4.96). Agreeableness personality trait had no relationship with psychological distress at $r(N= 89)$, $-.03$, $p>.05$ (M: 28.91, SD: 5.32). Conscientiousness personality trait had no relationship with psychological distress at $r(N= 89)$, $-.05$, $p>.05$ (M: 29.53, SD: 5.69). Neuroticism personality trait had no relationship with psychological distress at $r(N= 89)$, $.05$, $p>.05$ (M: 21.54, SD: 3.98). Openness to experience personality trait had no relationship with psychological distress at $r(N= 89)$, $-.14$, $p>.05$ (M: 36.64, SD: 7.50).

Table 2: Multiple Linear Regressions Statistics of Financial stress, Personality and Psychological Distress

Sources	R ²	Adj. R ²	B	Std. E	Df	T	B
	.431	.374			8		
(Constant)			23.19	5.4		4.29	
Affection			2.16	.29		7.39	1.19*
Relational			-1.02	.26		-3.89	-.59*
Physiology Response			-.97	.26		-3.48	-.49*
Extraversion			.06	.13		.43	.04
Agreeableness			.05	.12		.45	.04
Conscientiousness			-.15	.12		-1.19	-.13
Neuroticism			.17	.17		.92	.10
Openness to experience			-.08	.09		-.96	-.09

Results from table 2, showed that financial stress (affection, relational/interpersonal and physiology response)and personality traits (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience) accounted for 43.1% of the psychological distress, with $R^2 = .431$, adjusted $R^2=.374$, $(F_{8, 80}) = 7.56$, $p<.05$ shows that the overall model has significant contribution to psychological distress at 43.1%.

Affection dimension of financial stress had significant prediction on psychological distress at $(F_{8, 80}) \beta= 1.19$, $t = 7.39$, $p<.01$. Conversely, Relational/interpersonal dimension of financial stress at $(F_{8, 80}) \beta= -.59$, $t = -3.89$, $p<.01$; and Physiology response dimension of financial stress negatively predicted psychological distress at $(F_{8, 80}) \beta= -.49$, $t = -3.48$, $p<.01$.

Extraversion personality trait had no relationship with psychological distress at $(F_{8, 80}) \beta= .04$, $t = .43$, $p>.01$, agreeableness personality trait at $(F_{8, 80}) \beta= .04$, $t = .45$, $p>.01$, conscientiousness personality trait at $(F_{8, 80}) \beta= -.13$, $t = -1.19$, $p>.01$, neuroticism personality trait at $(F_{8, 80}) \beta= .10$, $t = .92$, $p>.01$ and openness to experience personality trait at $(F_{8, 80}) \beta= -.09$, $t = -.96$, $p>.01$ had no predictive effect on psychological distress.

Summary of the Findings

1. Financial stress (affection) had positive significant predictive effect on psychological distress, while relational/interpersonal and physiology response dimensions of financial had negative predictive effect on psychological distress.
2. Personality traits (extraversion, agreeableness, conscientiousness, neuroticism and openness to experience) had no predictive effect on psychological distress.

Discussion

Based on the findings, the first hypothesis which stated that financial stress will significantly predict psychological distress among caregivers of mental illness was accepted because financial stress (affection) had positive significant predictive effect on psychological distress, while relational/interpersonal and physiology response dimensions of financial had negative predictive effect on psychological distress. This means that as affection financial stress increases psychological distress increases, while as relational/interpersonal and physiology response dimensions of financial decreases psychological distress increases.

This finding agrees with Chai (2023) findings that indicated a strong correlation between psychological distress and financial concerns. The study also is in line with Sweet et al. (2013) study that noted financial strain was associated with greater psychological distress across outcomes, but most strongly with anxiety, although financial strain depletes mastery, self-esteem, and mattering, only mastery and self-esteem act as mediators between financial strain and psychological distress, with mastery predominant. More so, the finding agrees with Richardson et al., (2013) study that revealed that higher financial worries were significantly associated with higher psychological distress. Additionally, the association between financial worries and psychological distress was more pronounced among the unmarried, the unemployed, lower-income households, and renters than their counterparts.

Second hypothesis which stated that personality will significantly predict psychological distress among caregivers of mental illness was not accepted because none of the personality predicted psychological distress. This finding does agree partly with Bleidorn et al., (2019) study that showed that there was no temporal within-person association between openness and distress. Extraversion and conscientiousness were found to have bidirectional within-person relationships with distress, suggesting that increases in extraversion and conscientiousness are associated with decreases in distress over time and vice versa. Emotional stability and agreeableness showed unidirectional relationships with distress, with increased distress predicting decreased. Piquart & Sörensen, (2003) study that showed that Big Five personality traits and the six symptoms of psychological distress observed in the first step were stable. Moreover, they employed strength centrality as the key indicator to present the potential significance of diverse variables within a network. Allport (1937) argued that traits and personal dispositions are distinct from other characteristics, such as habits and attitudes. He agreed, however, that habits and attitudes are also capable of initiating, motivating and guiding behaviour

Conclusion

The study concluded that financial stress especially the affection dimension significantly predicted psychological distress while personality traits did not significantly predict psychological distress.

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