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More than money: Core self-evaluations, job characteristics and work-family conflict among women

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ABSTRACT

Integrating work and family life is a relevant concern, especially for women in the banking industry. While the impact of job characteristics on work-family conflict is well-documented, the moderating role of core self-evaluations (CSE) remains underexplored. This study aimed to investigate the role of CSE in moderating the relationship between job characteristics and workfamily conflict among married female bank employees in Nigeria. A cross-sectional survey was conducted with 245 married female bank employees in Enugu state. Participants were assessed using the Core Self-Evaluation, Job Characteristics, and Work-Family Conflict Scales. Pearson correlation analysis and path coefficient evaluation were utilised to test the study's hypotheses. Job characteristics, notably autonomy, feedback, skill variety, task identity, and task significance, influence work-family conflict across three dimensions: behaviour-based, strain-based, and timebased. Notably, CSE emerged as a significant moderator, with its influence varying depending on the job characteristics. The findings highlight the importance of considering both job characteristics and individual psychological attributes in addressing work-family conflicts. Organisations should adopt a multidimensional, individual-centred approach, recognising the intertwined roles of job factors and personal evaluations in shaping employees' work-life balance experiences.

1. Introduction

Balancing full-time work with family responsibilities is a universal challenge that crosses cultural, national, and economic lines. An estimated 70 % of workers worldwide struggle to reconcile work and family life, a tension particularly evident in high-demand sectors like banking, which often employ individuals with substantial family responsibilities [1,2]. This study focuses on work-family conflict in Nigeria, further intensified by socio-economic factors and traditional gender roles [3,4].

The COVID-19 pandemic has magnified these challenges, forcing millions to blend their work and family environments, transforming their homes into multifunctional spaces [5]. Factors such as job autonomy, workload, and job demands play a critical role in work-family conflict, especially in sectors with a high proportion of married women, such as banking [6,7]. While research by [8] indicates that psychological traits, like self-esteem and self-efficacy, may lessen the impact of job demands on family life, this area remains underexplored. Our study seeks to fill this gap, focusing on Nigeria's banking sector, a significant employment field facing unique challenges [4,9].

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Table 1			
Reliability and	l validity	of variable	es.

Variables	α	CR	AVE
Skill variety (JC)	0.752	0.736	0.598
Task identity (JC)	0.889	0.859	0.616
Task significance (JC)	0.754	0.791	0.545
Autonomy (JC)	0.844	0.861	0.648
Feedback (JC)	0.716	0.733	0.520
CSE	0.913	0.946	0.683
Behaviour-based (WFC)	0.98	0.983	0.91
Strain-based (WFC)	0.971	0.983	0.874
Time-based (WFC)	0.797	0.824	0.549

 α = Cronbach's alpha; CR= Composite reliability; AVE = Average variance extracted; JC = Job characteristics; WFC = Work-family Conflict.

Table 2	
Hetrotrait-monotrait discriminant validity.	

	Variables	1	2	3	4	5	6	7	8	9
1	Autonomy (JC)									
2	CSE	0.384								
3	Strain-based (WFC)	0.329	0.099							
4	Skill variety (JC)	0.235	0.517	0.367						
5	Task identity (JC)	0.182	0.274	0.328	0.75					
6	Time-based (WFC)	0.211	0.466	2.134	0.981	0.838				
7	Task significance (JC)	0.114	0.275	0.318	0.324	0.323	0.147			
8	behaviour	0.275	0.087	0.007	0.366	0.327	0.127	0.295		
9	Feedback (JC)	0.176	0.455	0.039	0.327	0.22	0.346	0.275	0.048	

This investigation is rooted in the Conservation of Resources (COR) Theory, which suggests stress arises from the loss, threat of loss, or insufficient recovery of valued resources [10]. In the workplace, intangible resources like time, energy, autonomy, and recognition become depleted. Depletion of these resources without adequate replenishment can lead to significant work-family conflict, affecting an individual's well-being and family life.

The COR Theory posits that individuals aim to acquire, retain, and protect their resources. However, job characteristics often determine how quickly resources are used and the opportunities for their recovery. For example, in the banking sector, high job demands can deplete personal resources, likely exacerbating Work-family tensions [11]. Nonetheless, the COR Theory also highlights those personal attributes, such as Core Self-evaluation (CSE) traits, that can influence individuals' perceptions and management of stressors, potentially buffering against the adverse effects of resource loss. CSE traits –including self-esteem, general self-efficacy, locus of control, and emotional stability – may serve as a significant reservoir of personal resources that could moderate the relationship between job characteristics and work-family conflict [12,13]. This research underscores the importance of environmental and personal factors in stress management and work-life balance, as envisioned by the COR theory [14].

1.1. Work-family conflict

Work-family conflict is a global issue, manifesting in time-based, strain-based, and behaviour-based conflicts [15]. It leads to psychological distress, health issues, and strained relationships, with pronounced effects among women juggling professional and domestic roles [16–20]. Therefore, we proposed the following hypothesis:

H1. Job characteristics will significantly predict Work-family conflict.

1.2. Job characteristics and COVID-19 pandemic impact

Job characteristics such as autonomy, workload, and demands significantly affect Work-family conflict [6,7]. Employers in the banking sector face these challenges, compounded by high unemployment and the traditional roles expected of women employees [4, 21]. The COVID-19 pandemic has intensified these challenges, necessitating adjustments in job characteristics and a reassessment of job structures [5,22,23]. Therefore, we proposed the following hypothesis:

H2. Core self-evaluation will significantly predict Work-family conflict.

1.3. Core self-evaluations as moderators

Core Self-evaluation (CSE) traits – self-esteem, locus of control, self-efficacy, and emotional stability – may be crucial in moderating the relationship between job characteristics and Work-family conflict [24]. Although linked to positive outcomes in work and life, the

	Variable	M	SD	1	7	ω	4	ŝ	9	7	œ	6	10	11	12	13	14	15
1	Age	26.48	4.56	-														
2	YIC	4.60	2.57	0.60**	_													
3	ELQ			0.17**	0.29**	_												
4	NOC	2.86	1.68	0.51**	0.34**	-0.20**	_											
5	ALC	3.20	2.09	0.47**	0.47**	0.20**	0.23**	_										
6	Support	1.98	1.09	0.21**	0.21**	-0.05	0.17**	0.14**	_									
7	Skill variety	16.35	4.56	-0.05	-0.02	-0.03	-0.03	-0.04	-0.16**	-								
8	Task identity	15.09	3.92	-0.14**	-0.16^{**}	-0.08*	0.07*	-0.09**	-0.34**	0.52**	-							
9	Task significance	14.49	2.13	0.03	0.15**	0.14**	-0.08*	0.00	0.03	0.13**	0.02	-						
10	Autonomy	14.40	3.95	0.03	0.02	-0.09**	0.08*	-0.02	-0.13^{**}	0.32**	0.26**	0.10**	-					
11	Feedback	22.30	3.30	-0.16^{**}	-0.11**	-0.08*	-0.00	-0.12^{**}	-0.16**	0.27**	0.35**	0.05	0.44**	-				
12	CSE	64.19	11.26	0.18**	0.11**	-0.01	0.17**	0.12**	0.04	0.38**	0.18**	0.01	0.34**	0.04	-			
13	Time-based (WFC)	23.38	10.46	-0.47**	-0.46**	-0.08*	-0.37**	-0.42**	-0.38**	0.30**	0.32**	0.02	0.05	-0.00	-0.00	-		
14	Strain-based (WFC)	19.51	8.67	-0.46**	-0.45**	-0.08*	-0.35**	-0.41**	-0.38**	0.30**	0.31**	0.00	0.07*	-0.01	0.06	0.98**	-	

 $Note^{**p} < 00.01$; *p < 00.05; ALC = Age of Last Child; NOC = Number of Children; YIC = Year in Company; Educational Level qualification = (1 = None; 2 = OND; 3 = Bachelor's degree, 4 = Masters; 5 = Doctorate); NOC = Number of Children, Support (1 = Spouse; 2 = Siblings; 3 = Nanny; 4 = Other relatives); WFC = Work-family conflict.

-0.08*

-0.14**

-0.04

-0.01

-0.08*

-0.14** 0.03

-0.07*

0.18**

0.19**

_

15

Behaviour-based (WFC) 14.15 5.78

-0.17**

-0.15**

0.09**

-0.12**

ω

Path	Coeff	T statistics	P values
			i vulues
Autonomy - > behaviour-based	-0.22	5.79	0.01
Autonomy - > strain-based	-0.01	0.26	0.40
Autonomy - > time-based	-0.02	0.60	0.28
Feedback - > behaviour-based	0.19	5.41	0.01
Feedback - > strain-based	-0.08	2.05	0.02
Feedback - > time- based	-0.08	1.98	0.02
Skill variety - > behaviour-based	-0.06	1.49	0.07
Skill variety - > strain-based	0.15	3.77	0.01
Skill variety - > time-based	0.16	4.02	0.01
Task identity - > behaviour-based	0.00	0.01	0.50
Task identity - > strain-based	0.26	6.99	0.01
Task identity - > time-based	0.28	7.35	0.01
Task significance - > behaviour-based	-0.11	4.30	0.01
Task significance - > strain-based	-0.01	0.32	0.37
Task significance - > time-based	-0.01	0.17	0.43
CSE - > behaviour-based	0.18	3.54	0.01
CSE - > strain-based	0.15	3.64	0.01
CSE - > time- based	0.06	1.40	0.08
CSE x autonomy - > behaviour-based	0.23	5.31	0.01
CSE x autonomy - > strain-based	0.26	8.79	0.01
CSE x autonomy - > time-based	0.22	7.10	0.01
CSE x feedback - > behaviour-based	0.06	1.61	0.05
CSE x feedback - > strain-based	-0.06	1.72	0.04
CSE x feedback - > time-based	-0.05	1.55	0.06
CSE x Skill variety - > behaviour-based	0.10	2.03	0.02
CSE x Skill variety - > strain-based	0.31	6.79	0.01
CSE x Skill variety $- >$ time-based	0.30	6.65	0.01
CSE x Task identity - > behaviour-based	-0.01	0.19	0.42
CSE x Task identity - $>$ strain-based	0.14	2.92	0.01
CSE x Task identity - $>$ time-based	0.08	1.73	0.04
CSE x Task significance - $>$ behaviour-based	-0.23	4.02	0.01
CSE x Task significance - $>$ strain-based	-0.10	2.09	0.02
CSE x Task significance - > time-based	-0.13	2.48	0.02

potential moderating effects of CSE traits are yet to be fully explored [25–27]. Therefore, we proposed the following hypothesis:

H3. Core self-evaluation will significantly moderate the relationship between job characteristics and Work-family conflict.

While there is a growing body of research on Work-family conflict and its implications in the workplace, the role of CSE traits in this dynamic remains underexplored. The traits assessed by Judge et al.'s [24] core self-evaluation scale, which measures one's capabilities and worth, self-esteem, locus of control, self-efficacy and emotional stability, can potentially moderate effects, as CSE traits have been linked to various positive work and life outcomes [25–27]. Scant research has delved into the role of CSE traits in moderating the relationship between job characteristics and Work-family conflict. However, the present study aimed to discover whether the present characteristics covered had a moderating effect on the known relationship between job characteristics and Work-family conflict among married female bank employees.

2. Method

2.1. Participants and procedure

All commercial banks in Enugu state, totalling fourteen, were organised into three clusters based on geographical location and operational scale. Two branches were randomly selected from each cluster through a balloting process to ensure a representative sampling, given the varied numbers of branches and the diverse demographic of married female employees across locations. This initial step ensured that the selection process was unbiased and inclusive of the banks' operational diversity. Following establishing these clusters, the study received ethical approval from the Humanities Internal Review Board. A formal letter of introduction from the Department was also obtained, facilitating access to bank authorities and potential participants. This letter played a crucial role in securing the cooperation of the management at the selected branches, allowing the research to focus exclusively on married female employees. Each branch assigned a member of staff trained as a research assistant to efficiently administer and collect the questionnaires. These assistants then compiled a list of all female employees who met the study's specific criteria – being married, living with their husbands, and having at least one child. The criterion sampling technique ensured that the study focused on a homogenous group relevant to the research objectives [28,29]. Questionnaires were distributed to those who met the selection criteria and consented to participate, with instructions for participants to take the questionnaires home. This approach provided participants ample time to consider their responses carefully, aiming for thoughtful and comprehensive completion. They were asked to return the filled questionnaires to their branch secretaries within one week.

Table 4

Table 5

Simple slope analysis	Coeff	T statistics	P values
Autonomy - $>$ behaviour-based conditional on CSE at -1 SD	-0.45	7.26	0.01
Autonomy - > behaviour-based conditional on CSE at Mean	-0.22	5.79	0.01
Autonomy - > behaviour-based conditional on CSE at $+1$ SD	0.02	0.29	0.39
Autonomy - > strain-based conditional on CSE at -1 SD	-0.26	5.50	0.01
Autonomy - > strain-based conditional on CSE at Mean	-0.01	0.26	0.40
Autonomy - > strain-based conditional on CSE at $+1$ SD	0.25	6.22	0.01
Autonomy - > time-based conditional on CSE at -1 SD	-0.24	4.73	0.01
Autonomy - > time-based conditional on CSE at Mean	-0.02	0.60	0.28
Autonomy - > time-based conditional on CSE at $+1$ SD	0.20	4.84	0.01
Feedback - > strain-based conditional on CSE at -1 SD	-0.02	0.42	0.34
Feedback - > strain-based conditional on CSE at Mean	-0.08	2.05	0.02
Feedback - $>$ strain-based conditional on CSE at +1 SD	-0.14	2.42	0.01
Skill variety - > behaviour-based conditional on CSE at -1 SD	-0.17	2.65	0.01
Skill variety - > behaviour-based conditional on CSE at Mean	-0.06	1.49	0.07
Skill variety - $>$ behaviour-based conditional on CSE at +1 SD	0.04	0.57	0.29
Skill variety - > strain-based conditional on CSE at -1 SD	-0.16	2.79	0.01
Skill variety - > strain-based conditional on CSE at Mean	0.15	3.77	0.01
Skill variety - $>$ strain-based conditional on CSE at +1 SD	0.46	7.08	0.01
Skill variety - > time-based conditional on CSE at -1 SD	-0.14	2.36	0.01
Skill variety - > time-based conditional on CSE at Mean	0.16	4.02	0.01
Skill variety - $>$ time-based conditional on CSE at +1 SD	0.46	7.33	0.01
Task identity - > strain-based conditional on CSE at -1 SD	0.12	1.91	0.03
Task identity - > strain-based conditional on CSE at Mean	0.26	6.99	0.01
Task identity - > strain-based conditional on CSE at +1 SD	0.40	6.63	0.01
Task identity - > time-based conditional on CSE at -1 SD	0.20	3.07	0.01
Task identity - > time-based conditional on CSE at Mean	0.28	7.35	0.01
Task identity - > time-based conditional on CSE at $+1$ SD	0.37	6.15	0.01
Task significance - $>$ behaviour-based conditional on CSE at -1 SD	0.12	1.94	0.04
Task significance - > behaviour-based conditional on CSE at Mean	-0.11	4.30	0.01
Task significance - $>$ behaviour-based conditional on CSE at +1 SD	-0.33	5.26	0.01
Task significance - $>$ strain-based conditional on CSE at -1 SD	0.09	1.94	0.03
Task significance - > strain-based conditional on CSE at Mean	-0.01	0.32	0.37
Task significance - $>$ strain-based conditional on CSE at +1 SD	-0.11	1.69	0.05
Task significance - $>$ time-based conditional on CSE at -1 SD	0.12	2.36	0.01
Task significance - > time-based conditional on CSE at Mean	-0.01	0.17	0.43
Task significance - $>$ time-based conditional on CSE at +1 SD	-0.13	1.96	0.03

The research emphasised the voluntary nature of participation and assured all participants of the confidentiality of their responses. Of the 292 questionnaires distributed, 276 were retrieved, and of those, 245 were correctly completed and thus included in the final analysis. This yielded an 83.90 % valid response rate, reflecting the procedure's efficiency and participant engagement. The participants' demographic profile ranged from 20 to 60 years, with a mean age of 26.48 (SD = 4.56). The educational background varied widely, including Ordinary Diploma holders (n = 24, 9.8 %), First Degree holders (n = 184, 75.1 %), Master's degree holders (n = 35, 14.3 %), and Ph.D. holders (n = 2, 0.8 %). Their ranks within the banks ranged from direct sales agents to senior managers, illustrating a broad spectrum of professional roles and experiences within the banking industry. This detailed demographic and procedural description underscores the study's methodological rigour and the depth of data collected for analysis.

2.2. Instruments

2.2.1. Core self-evaluation scale

In the present study, the Core Self-Evaluation Scale (CSE) developed by Judge et al. [24] was employed to assess foundational self-assessments concerning participants' worthiness and competence. The CSE is a multidimensional construct encompassing four primary personality traits: self-esteem (the intrinsic value one attributes to oneself), generalised self-efficacy (an individual's confidence in their capability to execute tasks and attain goals), neuroticism or emotional stability (the propensity to experience negative affective states), and locus of control (an individual's belief regarding the determinants of life outcomes, whether they are attributed to personal actions, termed as an internal locus, or to external circumstances, known as an external locus). The instrument comprises 12 items, soliciting responses on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree". Notably, the scale integrates positively- (items 2, 4, 6, 8, 10 and 12) phrased items to mitigate response bias and ensure comprehensive assessment. The CSE scale's psychometric properties have been robustly validated in prior research [30,31], demonstrating its efficacy in predicting critical occupational outcomes such as job satisfaction, job performance, and stress responses [24]. Sample items are, e.g., "When I try, I generally succeed" and "I do not feel in control of my success in my career".

2.2.2. Job characteristics scale

Job characteristics were measured using the job characteristics scale developed by Hackman and Oldham [32]. The 21-item job



Fig. 1. Interaction of autonomy and CSE on behaviour-based (WFC).

characteristics scale assessed employees' perceptions of job-related attitudes and behaviours. Sample items include: "The job requires me to use a number of complex or high-level skills" and "The outcomes of my work affect other people in very important ways". It is on a 7-point scale of 1- very inaccurate to 7-very accurate. Hackman and Oldham [32] and Kiggundu [33] reported a reliability index for skill variety, task identity, task significance, autonomy and feedback, and they are 0.71, 0.59, 0.66, 0.66, 0.71, and 0.78, 0.62, 0.59, 0.63, 0.70 for American and African samples respectively. A validation by Omoluabi [34] for Nigerian samples was achieved.

2.2.3. Work-family conflict scale

The 18-item Work-family conflict scale developed by Okonkwo [35] was used to assess Work-family conflict experienced by female bank employees. This instrument has three dimensions: strain, time-based and behaviour. Sample items include: "I do not participate in family activities because I spend much time in the office carrying out instructions from different superiors at the same time", and "I spend more time on the job than family because my boss is very demanding". The response is patterned on a five-point Likert-type format ranging from "strongly agree" to "strongly disagree". Respondents are expected to indicate the extent to which they agree with the listed statements regarding interference of work-to-family. High scores indicate higher Work-family conflict and lower scores indicate lower Work-family conflict. Internal consistency of 0.89 and convergent validity of 0.55 were obtained by Okonkwo [35].

2.3. Study design and data analysis

The study adopted a cross-sectional survey design, as data were collected to make inferences about the population of interest at one point in time [36]. Measurement and structural assessment were conducted among the study predictors and dependent variables, and a process in SmartPLS 4 was used to test the hypotheses. Age, years spent in the organisation, educational qualification, number and age of last child, and social support, were considered control variables.

2.4. Measurement model

As part of the measurement model evaluation, the study used Cronbach's alpha (CA) and composite reliability (CR) to measure the reliability of the constructs. All the CRs exceeded the recommended value of 0.700 [37]. Cronbach's alpha of each construct exceeded the 0.700 threshold. Convergent validity was acceptable because the Average Variance Extracted (AVE) was over 0.500. The results for reliability and validity along the factor loadings for the items are presented in Table 1. Discriminant validity was assessed by the Heterotrait-monotrait ratio of the correlations [38], with values below the threshold of 0.90. Hence, discriminant validity is



Fig. 2. Interaction of autonomy and CSE on strain-based (WFC).

established (see Table 2).

2.5. Structural model assessment

A structural equation model generated through SmartPLS was used to test the relationships. A good fitting model is accepted if the value of the Chi-Square/degrees of freedom (CMIN/df) is < 3 [39], the goodness-of-fit (GFI) indices [40], the Tucker and Lewis index (TLI) [41], and the confirmatory fit index (CFI) [42] computed value of the standardised root mean square residual (SRMR) < 0.05), and the root mean square error approximation (RMSEA) is between 0.05 and 0.08 [43]. The fit indices for the model are CMIN/df = 2.34, SRMR = 0.02, GFI = 0.995, TLI = 0.961, CFI = 0.996, and RMSEA = 0.069.

Table 3 shows that age prominently emerges as a determinant in managing Work-family tensions. With increasing age, there is a discernible decrease in Time-based (r = -0.47, p < 00.01), Strain-based (r = -0.46, p < 00.01), and Behaviour-based Work-Family Conflicts (r = -0.17, p < 00.01). This suggests that as individuals mature, they may adopt strategies or undergo shifts in work or family dynamics that reduce the inherent conflicts between these domains. Years in the Company (YIC) offers another intriguing insight. A longer tenure in an organisation is associated with reduced conflicts across all dimensions: Behaviour-based (r = -0.15, p < 00.01), Strain-based (r = -0.45, p < 00.01), and Time-based (r = -0.46, p < 00.01). This underscores the role of organisational familiarity and adaptation in fostering a balanced Work-family dynamic. Higher Educational Level Qualification (ELQ) presents a nuanced picture. While it is associated with a slight increase in Behaviour-based conflicts (r = 0.09, p < 00.01), it marginally buffers against Strain-based (r = -0.08, p < 00.05) and Time-based conflicts (r = -0.08, p < 00.05). Surprisingly, the Number of Children (NOC) an individual has consistently shown a negative relationship with all conflict dimensions, suggesting that larger families, contrary to intuitive beliefs, might be associated with reduced Work-family conflicts.

The Age of the Last Child (ALC), too, demonstrates its significance, particularly in the Strain-based (r = -0.41, p < 00.01) and Timebased dimensions (r = -0.42, p < 00.01), indicating that as the youngest child grows older, parents might experience reduced tensions between work and family roles. The type of support accessed by an individual, be it from a spouse, siblings, or other relatives, emerges as pivotal in managing Work-family tensions, especially against Strain-based (r = -0.38, p < 00.01) and Time-based conflicts (r = -0.38, p < 00.01). Job characteristics also wield influence. Skill Variety and Task Identity are positively associated with Strain-based and Time-based conflicts. At the same time, autonomy was negatively related to Behaviour-based conflicts, meaning that the more autonomous the worker was, the less behaviour-based conflict they experienced. However, autonomy led to a higher enhancement of Strain-based ones. Feedback mechanisms, however, seem to have a negligible impact on Work-family conflicts. Lastly, Core Self-Evaluations (CSE) present a minor negative association with Behaviour-based conflicts (r = -0.07, p < 00.05), hinting at the role





Fig. 3. Interaction of autonomy and CSE on time-based (WFC).

of personal evaluations in navigating Work-family challenges.

As shown in Tables 4 and 5, the result suggests that autonomy is negatively associated with behaviour-based conflict ($\beta = -0.22$, p < 0.001). This relationship is higher for individuals with low CSE ($\beta = -0.448$, p < 0.001) (see Fig. 1). In the strain and time-based conflict domains, the effect of autonomy diverges based on CSE levels; for individuals with low CSE, autonomy corresponds to a decrease in strain-based ($\beta = -0.264$, p < 0.001) and time-based conflicts ($\beta = -0.236$, p < 0.001). In contrast, high CSE individuals exhibit an increase in these conflicts (strain: $\beta = 0.247$, p < 0.001; time: $\beta = 0.195$, p < 0.001) (see Figs. 2 and 3).

However, feedback appears to have a reverse effect on the strain-based domain. High CSE individuals experience significant negative effects in the strain ($\beta = -0.137$, p = 0.008) (see Fig. 4).

The direct effect of skill variety on behaviour-based conflict is non-significant. However, low CSE individuals derive benefits ($\beta = -0.167$, p = 0.004) (See Fig. 5). For strain and time-based conflicts, skill variety augments tensions. This effect is particularly robust for high CSE individuals (strain: $\beta = 0.463$, p < 0.001; time: $\beta = 0.462$, p < 0.001) (see Figs. 6 and 7).

The findings indicated that task identity is positively associated with strain ($\beta = 0.26$, p < 0.001) and time-based conflicts ($\beta = 0.28$, p < 0.001). These associations are amplified for high CSE individuals (strain: $\beta = 0.401$, p < 0.001; time: $\beta = 0.366$, p < 0.001) (see Figs. 8 and 9).

Task significance related negatively with behaviour-based conflict ($\beta = -0.11$, p < 0.001). This effect strengthens for high CSE individuals ($\beta = -0.334$, p < 0.001) (see Fig. 10). The effect of task significance was insignificant in the strain and time-based conflict domains. In contrast, task significance and CSE interaction showed that high CSE individuals exhibit a complicated decrease in strain-based conflict ($\beta = -0.105$, p = 0.045) and in the time domain ($\beta = -0.132$, p = 0.025) (see Fig. 11).

3. Discussion

Exploring the moderating role of Core Self-Evaluations (CSE) in the interplay between job characteristics and Work-family conflict among married women in the Nigerian banking sector sheds light on the intricate dynamics governing workplace stress and the psychological resilience of employees. This study aligns with the Conservation of Resources (COR) theory, which posits that stress arises from the threat of resource loss, actual resource loss, and the lack of resource replenishment. Through this lens, our investigation contributes novel insights into the role of personal resources, precisely CSE traits, in moderating work-related stressors.

Supporting our first hypothesis, we found that job characteristics, notably job autonomy, significantly influence Work-family conflict. This result corroborates findings from earlier studies [44-47] and extends them by highlighting the unique context of the Nigerian banking sector – a field known for its high demands on employees. In line with the COR theory, our findings suggest that



Fig. 4. Interaction of Feedback and CSE on strain-based (WFC).

autonomy, an essential job characteristic, can act as a resource, mitigating the conflict between work and family roles. This supports the theory's assertion that resource gains (in this case, autonomy) can buffer against the adverse outcomes of stressors.

Our second hypothesis, examining the predictive role of CSE on Work-family conflict, was also supported. Lower CSE scores were associated with higher levels of conflict, indicating that personal resources (or the lack thereof) play a critical role in how work stressors affect family life. This finding aligns with the COR theory's emphasis on personal resources as buffers against stress and resource loss. It also confirms the importance of psychological traits, such as self-esteem and self-efficacy, as highlighted by Judge et al. [24], in managing job stressors effectively.

The third hypothesis extended this investigation into the moderating effects of CSE traits on the relationship between job characteristics and Work-family conflict. Our study revealed a complex pattern: while high CSE traits might be expected to buffer against Work-family conflict uniformly, these traits could also exacerbate conflict under certain conditions, such as increased job autonomy. This nuanced finding illustrates the COR theory's perspective on the double-edged nature of resources. While they generally protect against stress, their effects can vary depending on the individual's psychological resilience and the specific stressor context. For individuals with high CSE, greater autonomy might not always lead to reduced conflict; instead, it could intensify the pressure to perform, highlighting a sophisticated interaction between personal and job resources.

Unexpectedly, job characteristics such as skill variety and task identity were linked to increased strain and time-based conflicts, diverging from the generally positive associations suggested in previous literature [22,23,46,47]. This finding can be interpreted through the COR theory by considering these job characteristics as potential sources of resource depletion, particularly in a demanding sector like banking, where the high value placed on family responsibilities might intensify the conflict experienced by women.

In summary, this study underscores the critical role of CSE in navigating the challenges of Work-family conflict, affirming the relevance of the COR theory in understanding the dynamics of stress, resource loss, and the buffering effects of personal resources in the workplace. The complex interactions between job characteristics, CSE traits, and Work-family conflict emphasise the need to understand how personal and job-related resources interact to influence employees' well-being and work-life balance.

4. Implications of the study

This study elucidates significant implications for organisational practices, particularly within the banking sector, regarding managing Work-family conflict among married female employees. The findings highlight the pivotal role of job characteristics – namely, task identity and skill variety – in exacerbating strain-based and time-based conflicts. This suggests that jobs demanding a broad spectrum of skills or a robust sense of task identity may challenge the equilibrium between work and family responsibilities due



Fig. 5. Interaction of skill variety and CSE on behaviour-based (WFC).





Fig. 6. Interaction of skill variety and CSE on strain-based (WFC).





Fig. 7. Interaction of skill variety and CSE on time-based (WFC).





to their requirement for heightened cognitive and emotional engagement [45]. Conversely, task significance exhibited a protective effect against behaviour-based conflict, underscoring the potential of meaningful work to mitigate the encroachment of work behaviours into family life [48]. These insights underscore the necessity for organisational leadership to deliberate meticulously on job design, considering its potential repercussions on employees' family lives. Adopting job crafting interventions, allowing employees to personalise their job characteristics, emerges as a strategic initiative to alleviate Work-family conflict [49].

Furthermore, core self-evaluations (CSE) were identified as a significant predictor of Work-family conflict, albeit exhibiting a negative correlation with behaviour-based conflicts. This finding implies that individuals endowed with high CSE traits – marked by emotional stability, a potent belief in their ability to control their environment, and superior stress management skills – possess a comparative advantage in shielding their family life from the disruptive effects of work [50]. Consequently, this underscores the imperative for organisations to invest in staff development programmes to bolster employees' self-efficacy and emotional stability, potentially ameliorating the tensions arising from Work-family conflict.

Moreover, the study revealed that CSE significantly modulates the relationship between job characteristics and Work-family conflict. It was observed that individuals with lower CSE traits derived greater benefits from autonomous roles, experiencing diminished behaviour-based conflict. In contrast, those with elevated CSE traits reported an intensification of strain with increased autonomy [51]. This intricate interplay suggests that job characteristics' impact on Work-family conflict is inherently contingent upon the individual's core self-evaluations, positing that autonomy while facilitating flexibility, may concurrently impose a supplementary decision-making burden that could heighten Work-family conflict for individuals with high CSE. This insight propels the argument against a one-size-fits-all approach in job design, advocating for a personalised strategy that accommodates individual differences in core self-evaluations [52].

In summation, the ramifications of this investigation are profound, bearing significant consequences for human resource policies and practices within the banking industry. By acknowledging the intricate nexus between job characteristics, core self-evaluations, and Work-family conflict, banks can tailor their employee support strategies, job design, and development programmes to cultivate a more harmonious work and family life balance among their staff. These revelations contribute to a richer comprehension of how individual differences can sculpt the experience of Work-family conflict and accentuate the criticality of factoring psychological traits into the discourse on work-life balance challenges.

5. Limitations and future research

This study broadened and added existing knowledge on the role of CSE traits in the relationship between job characteristics and



Fig. 9. Interaction of task identity and CSE on time-based (WFC).



Fig. 10. Interaction of task significance and CSE on behaviour-based (WFC).





Fig. 11. Interaction of task significance and CSE on strain-based (WFC).

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Work-family conflict. However, it is not without its limitations. The cross-sectional design precludes causal inferences, and the findings are specific to married women in the Nigerian banking sector, which, despite the acceptable sample size, may limit generalisability. Future research could adopt a longitudinal approach to explore the causal relationships, and include other sectors and demographic groups to afford future research opportunities to enhance the findings' applicability.

6. Conclusion

In conclusion, the study findings highlight the significant role of job characteristics in predicting Work-family conflict and the moderating role of CSE traits. For practitioners, the findings highlight the need to create environments that nurture the development of CSE traits and to design job roles with an awareness of work-family balance challenges. Specifically for married women in the banking industry – and likely for employees more generally – CSE traits could be as vital as financial acumen in navigating the demands of work and family life.

Data availability statement

Data will be made available on request to the corresponding author.

Ethics statement

This research was conducted in full accordance with the ethical standards of the institutional and national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Before commencing the study, ethical approval was obtained from the Institutional Review Board (IRB) of Enugu State University of Science and Technology, Enugu, Nigeria, with the reference number IRB-HEC2022/03/PSY00032.

Informed consent

In compliance with ethical guidelines, informed consent was obtained from all participants included in the study. All participants were provided detailed information about the study's purpose, procedures, potential risks, and benefits. They were informed that their participation was entirely voluntary and that they could withdraw without any consequences. The anonymity and confidentiality of the responses were assured and strictly maintained throughout the research process.

Data privacy and confidentiality

The privacy and confidentiality of the participants were of utmost priority. Personal identifiers were removed from the dataset to ensure confidentiality. Data were stored securely and only accessible to the research team. The information collected was used solely for this study.

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CRediT authorship contribution statement

Lawrence Ejike Ugwu: Writing – review & editing, Writing – original draft, Methodology, Formal analysis. Adaobi Eze: Writing – original draft, Data curation, Conceptualization. Erhabor Sunday Idemudia: Writing – original draft, Validation, Supervision, Conceptualization.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests:Erhabor Sunday Idemudia is an associate editor for the journal. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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References

- T.D. Allen, K. Merlo, R.C. Lawrence, J. Slutsky, C.E. Gray, Boundary management and work-nonwork balance while working from home, Appl. Psychol. 70 (2021) 60–84, https://doi.org/10.1111/apps.12300.
- [2] International Labour Organization, Reports and documents submitted to the 110th session of the international labour conference, Retrieved from, http://www2. ilo.org/ilc/ILCSessions/110/reports/reports-to-the-conference/WCMS_836653/lang-en/index.htm, 2022.
- [3] N.L. Aberman, R. Birner, E.A.O. Odoyo, M.A. Oyunga, B. Okoba, G.O. Okello, Gender-inclusive governance of "self-help" groups in rural Kenya, Intl Food Policy Res Inst 1986 (2020).
- [4] K.M. Ngbea, Perceived Job Insecurity, Work Overload and Work-Family Conflict as Predictors of Turnover Intention Among Bank Employees in Benue State (Doctoral Dissertation), 2019.
- [5] J. Koetsier, 58% of American knowledge workers are now working remotely, Forbes (2020). Retrieved march 20, https://www.forbes.com/ ThisdocumentiscopyrightedbytheAmericanPsychologicalAssociationoroneofitsalliedpublishers.PushingTheBoundaries1625sites/johnkoetsier/2020/03/20/58of-american-knowledge-workers-arenow-working-remotely/#1b21e5f93303.
- [6] P. Bowen, R. Govender, P. Edwards, K. Cattell, Work-related contact, work-family conflict, psychological distress and sleep problems experienced by
- construction professionals: an integrated explanatory model, Construct. Manag. Econ. 36 (2018) 153–174, https://doi.org/10.1080/01446193.2017.1341638. [7] S. Winslow, Work-family conflict, gender, and parenthood, 1977-1997, J. Fam, Issues 26 (2005) 727–755, https://doi.org/10.1177/0192513X05277522.
- [8] T.D. Allen, The work-family interface, in: S.W.J. Kozlowski (Ed.), Oxford Handbook of Industrial and Organizational Psychology, Oxford University Press, New York, NY, 2012, pp. 1163–1198.
- [9] O. Gbenga, S.O. James, A.J. Adeyinka, Determinant of private sector credit and its implication on economic growth in Nigeria: 2000-2017, Am. Econ. Soc. Rev. 5 (2019) 10–20.
- [10] S.E. Hobfoll, Conservation of resources: a new attempt at conceptualizing stress, Am. Psychol. 44 (1989) 513.
- [11] M.K. Moorthy, J. Ling, N.F. Zainuddin, Factors affecting job satisfaction among educators: a comparison between primary and secondary school teachers, Educ. Next 133 (2013) 358–366.
- [12] T. Bipp, A. Kleingeld, T. Ebert, Core self-evaluations as a personal resource at work for motivation and health, Pers. Indiv. Differ. 151 (2019) 109556.
- [13] S. St-Onge, D. Morin, C. Biron, Assessing the psychometric properties of the stress and anxiety to viral epidemics-9 (SAVE-9) scale in a French-Canadian sample, BMC Psychiatr. 21 (2021) 1–9.
- [14] S.E. Hobfoll, The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory, Appl. Psychol. 50 (2001) 337–421.
- [15] J.H. Greenhaus, N.J. Beutell, Sources of conflict between work and family roles, Acad. Manag. Rev. 10 (1985) 76-88.
- [16] S. Geurts, M. Kompier, S. Roxburgh, I. Houtman, Does Work–Home Interference mediate the relationship between workload and well-being? J. Vocat. Behav. 63 (2003) 532–559.
- [17] K.M. Lawson, S. Lee, D. Maric, Not just Work-family conflict, but how you react to it matters for physical and mental health, Work. Stress 35 (2021) 327–343, https://doi.org/10.1080/02678373.2021.1888821.
- [18] P.J. Badawy, S. Schieman, Controlling or channeling demands? How schedule control influences the link between job pressure and the work-family interface, Work Occup. 48 (2021) 320–352, https://doi.org/10.1177/0730888420965650.
- [19] L. Chai, S. Schieman, Work-family conflict and children's problems with school, friends, and health: household economic conditions and couple relationship quality as contingencies, J. Fam. Issues 43 (2022) 1555–1578, https://doi.org/10.1177/0192513X211026953.
- [20] L.E. Ugwu, I.K. Enwereuzor, B.E. Nwankwo, S. Ugwueze, F.N. Ogba, E.E. Nnadozie, M.A. Ezeh, Proactive personality and social support with pre-retirement anxiety: mediating role of subjective career success, Front. Psychol. 12 (2021) 569065.
- [21] E. Okonkwo, Work time and family time conflict among female bankers: any relationship? IFE Psychol. 22 (2014).
- [22] D.M. Gardner, T. Lauricella, A.M. Ryan, P. Wadlington, F. Elizondo, Managing boundaries between work and non-work domains: personality and job characteristics and adopted style, J. Occup. Organ. Psychol. 94 (2021) 132–159, https://doi.org/10.1111/joop.12339.
- [23] S. Hokke, S.K. Bennetts, J. Love, L. Leach, S.B. Crawford, A.R. Cooklin, What happened to parents' work-family conflict from before to during COVID-19? Findings from a longitudinal Australian study, Community Work Fam, 2023, pp. 1–22, https://doi.org/10.1080/13668803.2023.2252159.
- [24] T.A. Judge, A. Erez, J.E. Bono, C.J. Thoresen, The core self-evaluations scale: development of a measure, Pers, Psychol. 56 (2003) 303–331, https://doi.org/
- 10.1111/j.1744-6570.2003.tb00152.x.
 [25] E.J. Cross, N.C. Overall, S.D. Jayamaha, C.G. Sibley, Does low self-esteem predict lower wellbeing following relationship dissolution? J. Soc. Pers. Relat. 38 (2021) 2184–2204, https://doi.org/10.1177/02654075211005843.
- [26] T.A. Judge, J.E. Bono, A. Erez, E.A. Locke, Core self-evaluations and job and life satisfaction: the role of self-concordance and goal attainment, J. Appl. Psychol. 90 (2005) 257–268, https://doi.org/10.1037/0021-9010.90.2.257.
- [27] J.M. Sirisompan, The Impact of Health Locus of Control and Personality Traits on Health Behaviours of Millennialism Thailand as Mediated by Self-Efficacy and Self-Esteem, Assumption University of Thailand, 2021. Master's thesis.
- [28] M.Q. Patton, Qualitative Research and Evaluation Methods, second ed., Sage publications, Thousand Oaks, CA, 2001.
- [29] M. Saunder, P. Lewis, A. Thornhill, Research Methods for Business Students, sixth ed., Pearson Education Limited, 2012.
- [30] M. Beléndez, A. Gómez, S. López, G. Topa, Psychometric properties of the Spanish version of the core self-evaluations scale (CSES-SP), Pers. Indiv. Differ. 122 (2018) 195–197.
- [31] A. Mäkikangas, U. Kinnunen, S. Mauno, E. Selenko, Factor structure and longitudinal factorial validity of the core self-Evaluation scale, Eur. J. Psychol. Assess. (2016).
- [32] J.R. Hackman, G.R. Oldham, Development of the job diagnostic survey, J. Appl. Psychol. 60 (1975) 159–170.
- [33] M.N. Kiggundu, An empirical test of the theory of job design using multiple job ratings, Hum. Relat. 33 (1980) 339-351.
- [34] P.F. Omoluabi, Validation of Job Characteristics Scale in Nigeria, PPC Consultants, Lagos, 2000.
- [35] A.E. Okonkwo, Work-family Conflict as Predictor of Burnout Among Mothers in Human Services Profession (Unpublished Ph.D. Thesis), Enugu State University of Science and Technology, Enugu, 2011.
- [36] J. Hall, Cross-sectional survey design, in: P.J. Lavrakas (Ed.), Encyclopedia of Survey Research Methods, Sage, Thousand Oaks, CA, 2008, pp. 173–174.
- [37] M.M. Wasko, S. Faraj, Why should I share? Examining social capital and knowledge contribution in electronic networks of practice, MIS Q. 35 (2005) 35-57,
- https://doi.org/10.2307/25148667
- [38] J. Henseler, C.M. Ringle, M. Sarstedt, A new criterion for assessing discriminant validity in variance-based structural equation modeling, J. Acad. Market. Sci. 43 (2015) 115–135, https://doi.org/10.1007/s11747-014-0403-8.
- [39] L.T. Hu, P.M. Bentler, Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives, Struct. Equ. Model. 6 (1999) 1–55, https://doi.org/10.1080/10705519909540118.
- [40] J.F. Hair, W.C. Black, B.J. Babin, R.E. Anderson, Multivariate Data Analysis, seventh ed., Prentice Hall, Upper Saddle River, NJ, 2010.
- [41] L.R. Tucker, C. Lewis, A reliability coefficient for maximum likelihood factor analysis, Psychometrika 38 (1973) 1–10.
- [42] P.M. Bentler, Comparative fit indexes in structural models, Psychol. Bull. 107 (1990) 238-246, https://doi.org/10.1037/0033-2909.107.2.238.
- [43] C. Fornell, D.F. Larcker, Evaluating structural equation models with unobservable variables and measurement error, J. Mark. Res. 18 (1981) 39–50, https://doi. org/10.1177/002224378101800104.
- [44] M.T. Jamal, W.R. Alalyani, P. Thoudam, I. Anwar, E. Bino, Telecommuting during COVID-19: a moderated-mediation approach linking job resources to job satisfaction, Sustainability 13 (2021) 11449, https://doi.org/10.3390/su132011449.
- [45] A.B. Bakker, E. Demerouti, The job demands-resources model: state of the art, J. Manag. Psychol. 22 (2007) 309–328.

- [46] A. Mooghali, K.B. Lankarani, H. Abedi, Y. Sarikhani, The relationship between job characteristics and work-family conflict among married women employed in clinical wards of Shiraz University-Affiliated hospitals, Women's Health Bull 2 (2015) 241–251.
- [47] E. Wang, C. Lin, How work design characteristics affect service employees' work-family conflicts, Serv. Ind. J. 38 (2018) 540-558, https://doi.org/10.1080/ 02642069.2017.1421635.
- [48] G.L. Staines, Spillover versus compensation: a review of the literature on the relationship between work and nonwork, Hum. Relat. 33 (1980) 111–129.
 [49] A. Wrzesniewski, J.E. Dutton, Crafting a job: revisioning employees as active crafters of their work, Acad. Manag. Rev. 26 (2001) 179–201.
- [50] T.A. Judge, J.E. Bono, Relationship of core self-evaluations traits-self-esteem, generalized self-efficacy, locus of control, and emotional stability-with job satisfaction and job performance: a meta-analysis, J. Appl. Psychol. 86 (2001) 80-92.
- [51] T.A. Judge, E.A. Locke, C.C. Durham, The dispositional causes of job satisfaction: a core evaluations approach, Res. Organ. Behav. 19 (2002) 151-188.
- [52] S.K. Parker, U.K. Bindl, K. Strauss, Making things happen: a model of proactive motivation, J. Manag. 36 (2010) 827–856.