Validation of Psychometric Properties of an Instrument Measuring Employee Job Performance: The Case of Individual Work Performance Questionnaire

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Abstract: Job performance (JP) remains a topical construct in both the academic and practical literature because it offers employees several benefits and the organisation, success and competitive advantage in the turbulent business environments. Thus, using a rigorous instrument to assess JP is considered vital to generate credible results to inform strategic human resources policy decisions. Currently, among the plethora of existing instruments, the Individual Work Performance Questionnaire (IWPQ) appears to be the most widely used instrument. Despite the extensive interest in the IWPQ, not much is known about its psychometric properties in the Ghanaian work context. This study provides evidence of the psychometric properties (reliability and validity) of the IWPQ instrument from the Ghanaian work environment, emphasising the usefulness of this instrument in a developing African country work context. A quantitative online cross-sectional approach was employed. The IWPQ instrument was returned by 347 out of 430 participants who were conveniently recruited from a Ghanaian financial work environment. Data were explored using descriptive statistics, EFA and CFA techniques. The EFA findings demonstrated a three-factor structure for the IWPQ instrument: task performance, contextual performance and counterproductive work behaviours, respectively. Moreover, the CFA findings affirmed the internal consistency, convergent validity, discriminant validity and fitness of the three-factor JP model, thereby supporting the construct validity of the IWPQ instrument. The findings show that the IWPQ instrument is reliable and valid within the sample, implying that practitioners and academics can use it to examine and understand employees' JP related behaviours in the understudied institution.

Keywords: Confirmatory Factor Analysis, Exploratory Factor Analysis, Ghanaian Financial Employees, Job Performance, Psychometric Properties, Reliability, Validity

1. Introduction

The individual job performance (JP) variable relates to the observable and measurable behaviours and actions of individual employees at work pertinent to achieving organisational goals (Campbell et al, 1993; Dwiliesanti & Yudiarso, 2022). JP is a topical concept that has received extensive support in the academic and practical literature due to its relevance to both the individual and employing organisations. Evidence attests that higher performing employees are not only recognised and rewarded with incentives – bonuses and/or promotions – offered career progression opportunities, but they also experience a feeling of satisfaction, mastery, pride and enhanced motivation compared to low-performing employees who may be thought to often experience feelings of personal failure, dissatisfaction and demotivation (Kristiani et al, 2021; Kumari et al, 2021; van der Vaart, 2021). On the other hand, the literature demonstrates that high-performing employees are also a requisite for organisational success. This is because higher-performing employees do not only work to promote immediate organisational objectives, but they equally work to ensure the organisation remains competitive in turbulent business environments (Pandey, 2019; van der Vaart, 2021).

In Ghana, both the financial institutions and their employees are under constant pressure to deliver due to the erstwhile financial crisis that occurred between 2017 and 2019 and the subsequent measures instituted by the central bank, which necessitated the need for these institutions to remain competitive in such a volatile financial environment (Boateng, 2025). Thus, measuring employee's JP is vital for financial institutions to not only understand employees' behaviours that are relevant to organisational effectiveness, but also to understand the antecedents and consequences of employee performance to inform strategic human resources policy decisions (Kulachai et al, 2023; Ramos-Villagrasa et al, 2019). In this regard, previous studies have emphasised that organisations do not make performance improvement decisions in isolation but they depend on research outputs to inform such initiatives (Koopmans et al, 2016; van der Vaart, 2021). This implies that sound and credible research outputs are necessary to aid organisational decisions (Ramos-Villagrasa et al, 2019; van der Vaart, 2021). Given this, it seems apt to emphasise that any instrument used to determine employees' performance in the workplace must be deemed to be comprehensive, reliable, valid and adaptable to different cultural and work contexts (Danderman et al, 2020; Koopmans, 2015; Koopmans et al, 2016).

While a plethora of instruments are available in the market for evaluating employees' JP ranging from supervisor rating instruments to self-report instruments, the Individual Work Performance Questionnaire (IWPQ, Koopmans et al, 2013a), appear to be the most widely used and validated instrument in the literature (Kenig, 2022; Kulachai et al, 2023). The IWPQ is a multidimensional, short but generic 18-item self-report instrument that can be administered to employees working in different jobs with ease. It was developed primarily for research studies to measure employees' behaviours at work that are considered relevant to the success of the employing organisation. Consequently, the instrument integrates all the pertinent factors of JP in a single instrument – it provides a comprehensive way to measure the diverse actions that constitute JP in different work environments with no antithetical items (Danderman et al, 2020; Koopmans, 2015).

Despite an extensive interest in the IWPQ, less is known about its psychometric properties in the Ghanaian work context. Additionally, most of the studies evaluating the psychometric properties of this instrument were done elsewhere with different socio-cultural and economic environments (Danderman et al, 2020; Dwiliesanti & Yudiarso, 2022; Kenig, 2022; Koopmans et al, 2016; Kulachai et al, 2023; Ramos-Villagrasa et al, 2019). This corroborates with the literature emphasising the need for context relevant validated IWPQ instrument (Koopmans et al, 2011; Koopmans, 2015; van der Vaart, 2021). A plausible reason is that culture shapes individuals' experiences which in turn could influence how they respond to self-report instruments like the IWPQ. Put succinctly, the meaning assigned to items in the IWPQ may differ in different work and cultural context, thereby limiting generalisability of the results to other contexts (Koopmans et al, 2011; Koopmans, 2015). Thus, considering that unique socio-cultural, organisational and work environments could affect the reliability and validity of an instrument, evaluating the IWPQ in the Ghanaian context —a developing African country, is essential to determine its practical usefulness in this environment. This preliminary study evaluates the reliability and validity of the IWPQ in a Ghanaian financial work environment. The study also contributes to the ongoing evaluation of the IWPQ instrument.

2. Literature Review

2.1 An Overview of the Individual Work Performance Questionnaire

The development of the IWPQ arose from Koopmans et al.'s (2011, 2013a) observation that there was no single scale in the literature – at the time that combined and measured all the factors of JP, thus, to these theorists, the existing instruments had failed to integrate the full spectrum of individual employees' behaviours in the work environment. Furthermore, the theorists also observed that some of the items in the existing scales were antithetical – they overlapped with items in other scales measuring different JP subfactors (Koopmans et al, 2011; 2013ab). Therefore, there was a need to develop a single but comprehensive instrument that captures the full range of employees' behaviours at work with no antithetical items (Koopmans et al, 2011; 2013ab).

Koopmans et al (2013a) developed the IWPQ to measure the utility and applicability of their earlier four-factor model conceptualisation representing contextual performance (CP), adaptive performance (AP), task performance (TP), and counterproductive work behaviour (CWB) (Koopmans et al, 2011). CP relates to individual employees' behaviours that support the social, psychological and organisational context in which the employee executes the core task roles. AP is ascribed to the individual employee's willingness or ability to adjust to the changes occurring in the work environment or job roles. TP is ascribed to the individual employee's proficiency in the execution of the core task roles. CWB, on the other hand, relates to individual employees' behaviours that are detrimental to the effectiveness of the employing organisation (Koopmans et al, 2011, 2013ab).

Anchored on this conceptualisation, Koopmans et al (2013a) drew a pool of items from the previous literature and through interviews with experts. This resulted in the identification of a 47-item instrument evaluating the four dimensions of JP namely, CP, AP, TP, and CWB. The theorists piloted the first version (IPWQ 0.1) of the instrument using 54 research experts which resulted in the modification and rephrasing of items to ensure their readability and clarity as well as prolonging the recall period from four weeks to three months (Koopmans, 2015).

Following the successful pilot test, the modified 47-item IWPQ version 0.1 was field-tested using a sample of 1181 employees across several occupational sectors in the Netherlands. The findings from the Rasch analysis demonstrated that only three (TP, CP, and CWB) out of the four factors yielded the best fit for the model (Koopmans et al, 2013a). The theorists noted through the Rasch analysis that items in the AP scale loaded onto the CP scale therefore they eventually merged AP with the CP subfactor. This process resulted in the birth of a 14-item IWPQ version 0.2 (Koopmans et al, 2014).

The theorists further reviewed and adjusted version 0.2 of the newly developed instrument by including additional items they considered appropriate resulting in the rebirth of a 27-item IWPQ version 0.3 with specific items measuring each of the three factors: TP (7 items), CP (12 items) and CWB (8 items) (Koopmans et al, 2014). This version of the instrument was further tested using a sample of 1 424 employees spread across several organisations and occupational fields in the Netherlands (Koopmans et al, 2014). The findings from the Rasch analysis resulted in the elimination of all the misfitted items from the instrument to generate the final, generic, and short 18-item IWPQ instrument version 1.0 with five items, eight items, and five items measuring the subfactors TP, CP, and CWB respectively. The items in the three factors are measured on a 5-point Likert scale.

Because the original IWPQ instrument was developed in the Dutch language, there was a need to verify its usefulness in other cultures or languages. Following this necessity, Koopmans et al (2016) translated the revised 18 Dutch items into English Language and subsequently tested their cross-cultural adaptability using a sample of 40 employees functioning in a medical centre in the United States. The findings demonstrated that the 18-item English version of the IWPQ instrument was culturally adaptable with good internal consistency and adequate convergent and discriminant validity.

2.2 Evidence of Reliability and Validity of the IWPQ

The reported internal steadiness–reliability estimate for the IWPQ subscales is judged to be acceptable ranging from 0.78 (TP); 0.79 (CWB) and 0.85 (CP) (Koopmans, 2015), 0.77 (CWB), 0.83 (TP) and 0.87 (CP) (Ramos-Villagrasa et al, 2019), 0.68 (CWB), 0.89 (TP) and 0.91 (CP) (van der Vaart, 2021), 0.73 (TP), 0.84 (CP) to 0.86 (CWB) (Kenig, 2022), 0.82 (CWB), 0.85 (CP), and 0.86 (TP) (Dwiliesanti & Yudiarso, 2022) and lastly, 0.92 (TP) to 0.99 (CP and (CWB) (Kulachai et al, 2023).

Regarding the validity of the IWPQ instrument, evidence from different contexts suggest that the instrument possesses sufficient convergent validity, discriminant validity, cross-cultural validity, and nomological validity suggesting a good construct validity of the instrument (Kenig, 2022; Koopmans, 2015; Koopmans et al, 2016; Ramos-Villagrasa et al, 2019; van der Vaart, 2021). A Thai study by Kulachai et al (2023) equally demonstrates a good convergent reliability of the IWPQ instrument, however, the authors noted that their model did not fit well with the data. These studies demonstrate that the revised 18-item instrument can reliably be used as a generic measure of employees' JP across all types of jobs in all organisations.

Given the existing paucity of empirical validation of the IWPQ instrument in the Ghanaian context, the present study seeks to support the current validation of the instrument by providing further psychometric information (reliability and validity) using sampled employees working in a financial institution. Evaluating the psychometric properties of the IWPQ instrument in Ghana allows the researchers to determine the relevance of the items in the instrument within the local work context, thereby supporting the utility of the IWPQ instrument in a different cultural context.

3. Aims

The aims of this study were formulated as:

a) to examine the factor structure of the IWPQ using EFA within sampled employees working in a Ghanaian financial work context.
b) to assess the validity (convergent and discriminant) of the IWPQ within the sampled employees operating in a Ghanaian financial work context.

4. Methodology

4.1 Research Approach

A quantitative cross-sectional research tradition was employed in this study to sufficiently accomplish the stated aims. This design perspective allowed the researchers to use a single questionnaire to gather the needed data at a specified period. Consequently, this design was deemed suitable to investigate the IWPQ factor structure.

4.2 Participants

The participants consisted of 430 employees conveniently drawn from a population of 670 employees working in a financial work environment with approximately 80% response rate. The participants were mostly under 40

years (66%) and mainly females (53%) with more than 15 years' experience (52%) working in lower ranked position (63%) and holding a bachelor's degree (53%).

4.3 Instrument

A biographical information sheet was used to collect participants' information concerning age, gender, wok experience, qualification and job level.

4.3.1 Job Performance

The self-report 18-item IWPQ instrument developed and validated by Koopmans et al (2014) was adapted to assess employees' performance. The instrument measures TP, CP and CWB components of the JP construct with statements: "I managed my time well" and "I took on extra responsibilities" on a 5-point rating scale (1—strongly disagree, 5—strongly agree). Cronbach's α values in this study ranged between 0.897 and 0.943.

4.4 Data Analysis

Data were explored through both SPSS 23 and AMOS 22 software. Participants demographics and the measuring instrument were initially evaluated descriptively. Thereafter, an EFA technique was performed to examine the factor structure of the IWPQ instrument. Lastly, a CFA technique was carried using the maximum likelihood procedures to determine the fit indices, internal reliability, convergent validity and discriminant validity of the IWPQ instrument for the sampled employees in the Ghanaian financial work environment.

5. Results

The results of this study are hereby presented in terms of the descriptive analysis and factor structure (dimensionality) of the items in the IWPQ instrument. Followed by the reliability (internal consistency), validity (convergent and discriminant validities), and fit indices of the IWPQ measurement model.

5.1 Descriptive Statistics

Table 1 reveal the mean figures for the three- factor structure IWPQ instrument ranged from 1.614 to 3.863 with standard deviation values falling between 0.770 and 1.057, suggesting the participants held a positive view regarding their performance in the financial work environment.

Table 1: Descriptive results

Construct	Factors	Number of Items	Reliability	Mean Score	Standard Deviation	Position in Rank Order
Job Performance	TP	5	0.920	3.862	0.811	1
	CP	6	0.943	3.181	1.057	2
	CWB	3	0.897	1.614	0.770	3

5.2 Instrument Dimensionality

The IWPQ instrument was examined to determined its factor structure within the sample using an EFA analysis. Consequently, a principal component analysis and Varimax rotation with Kaiser normalisation was performed. Loadings ≥ 0.50 were considered sufficient for the least factor loadings. Similarly, the instrument's communality was calculated to ascertain an adequate level of explanation. All communalities were higher than 0.50.

Moreover, KMO and Bartlett's Test of Sphericity were performed to ascertain whether the data were adequate for factor analysis. Table 2 shows a KMO value of 0.928 with significant Bartlett's tests (P = 0.000), indicating the sampled data were appropriate for further exploration.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.928
Bartlett's Test of Sphericity	Approx. Chi-Square	4924.387
	df	153
	Sig.	.000

Source: Research results

The EFA analysis reveals that all the items loaded sufficiently onto their respective factors consistent with the original theoretical model (Koopmans, 2015). Resulting in a three-factor solution with 18-items and item loadings ranging between 0.589 and 0.801. Factor 1, Task Performance (TP) has five items, Factor 2, Contextual Performance (CP) has eight items whereas Factor 3, Counterproductive work Behaviour (CWB) has five items. The three factors explained 48.9% of the total variance in the data. Table 3 illustrates the rotated factor loadings.

Table 3: EFA Results – rotated component matrix

Items	Component		
	1	2	3
Task Performance			
TP1	.768		
TP2	.778		
TP3	.773		
TP4	.801		
TP5	.786		
Contextual Performance			
CP1		.648	
CP2		.732	
CP3		.637	
CP4		.616	
CP5		.784	
CP6		.741	
CP7		.758	
CP8		.742	
Counterproductive Work Behaviour			
CWB1			.589
CWB2			.621
CWB3			.699
CWB4			.755
CWB5			.758

NOTE: Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. Rotation converged in 18 iterations.

5.3 Confirmatory Factor Analysis

A CFA analysis was performed through the maximum likelihood procedure to determine the three-factor measurement model's fitness, reliability and validity. Table 4 outlines the initial CFA results.

Table 4: Initial measurement model

Scale Item	Code	Standardised Loading	*t*-Value	R-Square
TP				
	TP1	0.782	-	0.611
	TP2	0.838	17.122	0.702
	TP3	0.863	17.788	0.745
	TP4	0.863	17.786	0.745
	TP5	0.828	16.88	0.686
CP				

Scale Item	Code	Standardised Loading	*t*-Value	R-Square
	CP1	0.822	-	0.676
	CP2	0.869	20.094	0.756
	CP3	0.634	12.905	0.402
	CP4	0.602	12.103	0.362
	CP5	0.886	20.743	0.786
	CP6	0.886	20.713	0.784
	CP7	0.865	19.929	0.748
	CP8	0.803	17.79	0.645
CWB				
	CWB1	0.712	-	0.507
	CWB2	0.462	8.218	0.213
	CWB3	0.864	15.279	0.747
	CWB4	0.849	15.022	0.720
	CWB5	0.875	15.456	0.766

Sample Size (N) = 347. Model Fit Indices: CMIN/DF=4.002; CFI=0.919; GFI=0.861; NFI= 0.895; RMR=0.052; RMSEA=0.093; P-Close=0.000

The initial results (Table 4) showed some unfit indices requiring further adjustment to improve the model's fitness (Kline, 2023). Consequently, the measurement model was revised to enhance its fitness, integrity and validity based on the cross loadings, measurement errors, sizes of factor loadings, and association between the measurement errors (Hu & Bentler, 1999; Schreiber et al, 2006). Thus, two items from the CWB (CWB1, CWB2) and CP (CP3, CP4) subscales were subsequently deleted from the model. Finally, 14-items measuring TP (five items), CP (six items) and CWB (three items) fitted well to the data with sufficient validity and reliability for the model. Figure 1 depicts the final measurement model

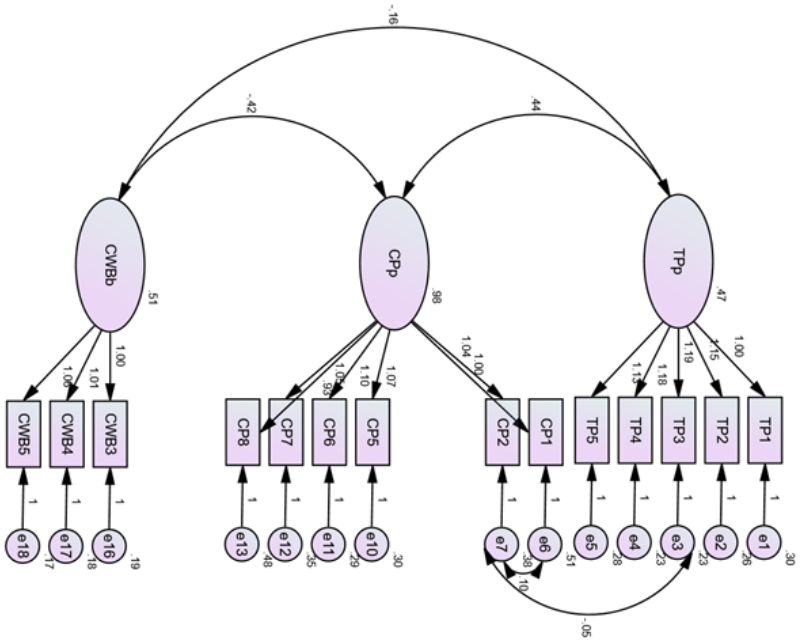

Figure 1: Final measurement model for JP

Moreover, Table 5 demonstrates acceptable fit indices: chi-square/degree of freedom (CMIN/DF=2.016), comparative fit index (CFI=0.979), goodness of fit index (GFI=0.936), normed fit index (NFI= 0.959), root mean square residual (RMR=0.042), root mean square error of approximation (RMSEA=0.054), and probability of close (P-Close=0.257). This suggests that the three-factor model explored through CFA technique sufficiently fitted the sampled data because the obtained fit indices were within the recommended threshold (Hu & Bentler 1999; Schreiber et al. 2006).

5.4 Internal Consistency

The Composite reliability (CR) and Cronbach's alpha (Cα) values were used as estimates for the measurement model's internal reliability. Table 5 demonstrates that the CR values for the three-factor model were between 0.898 and 0.943 whereas the Cα values were between 0.897 and 0.943. In terms of the literature, the obtained values are higher than the 0.70 threshold (Hair et al, 2014; Nunnally & Bernstein, 1994), suggesting that the IWPQ measurement possesses an excellent internal steadiness.

Table 5: CFA results for final measurement model

Scale Item	Code	Standardised Loading	*t*-Value	R-Square	Composite Reliability	AVE	Cronbach's Alpha
TP					0.920	0.698	0.920
	TP1	0.782	-	0.611			
	TP2	0.838	17.124	0.702			
	TP3	0.863	17.783	0.745			
	TP4	0.863	17.789	0.745			
	TP5	0.829	16.886	0.687			
CP					0.943	0.735	0.943
	CP1	0.830	-	0.683			
	CP2	0.871	20.319	0.758			
	CP5	0.887	20.963	0.787			
	CP6	0.893	21.078	0.792			
	CP7	0.864	20.123	0.749			
	CP8	0.795	17.827	0.641			
CWB					0.898	0.745	0.897
	CWB3	0.863	-	0.742			
	CWB4	0.853	15.117	0.718			
	CWB5	0.872	15.555	0.764			

Sample Size (N) = 347. Model Fit Indices: CMIN/DF=2.016; CFI=0.979; GFI=0.936; NFI= 0.959; RMR=0.042; RMSEA=0.054; P-Close=0.257

5.5 Convergent Validity

The convergent validity of the items in the IWPQ measurement model was evaluated employing the average variance extracted (AVE) and factor loadings. Results in Table 5 indicates that the AVE values were between 0.698 and 0.745 whereas the factor loadings were also between 0.782 and0.896. These values were higher than the required 0.50 threshold for AVE and least loadings (Fornell & Larcker, 1981; Hair et al, 2014), suggesting adequate convergence of the measurement model.

5.6 Discriminant Validity

The discriminant validity of the IWPQ measurement model was explored by employing the Fornell and Larcker criterion (1981). This method requires that a latent variable has a sufficient discriminant effect against others when the square root of the AVE is greater than the linkage between the latent variable and other variables in the model (Fornell & Larcker, 1981). Accordingly, Table 6 demonstrates that the discriminant validity of the IWPQ measurement model was sufficiently achieved.

Table 6: Discriminant validity results

Construct		Job Performance		
	Item	TP	CP	CWB
Job Performance	TP	0.835		
	CP	0.450	0.857	
	CWB	-0.338	-0.398	0.863
Composite Reliability		0.920	0.943	0.898
Average Variance Extracted		0.698	0.735	0.745
Cronbach's Alpha		0.920	0.943	0.897

Notes: *N = 347. Since the square root of the Average Variances Extracted (values on the diagonal) are greater than the corresponding inter-construct correlations (values off the diagonal), discriminant validity is achieved* (Fornell & Larcker, 1981).

6. Discussion

The study aimed to assess the psychometric properties of the IWPQ instrument within sampled employees working in a Ghanaian financial institution by determining both its factor structure and validity. The initial EFA evaluation of the participants responses to the items in the instrument within the Ghanaian financial work context produced a three-factor solution for the JP model, viz: TP, CP and CWB. Consistent with this position, previous analysis demonstrates that the JP construct is a multidimensional construct with three-factor structure consisting of TP, CP and CWB components (Danderman et al, 2020; Koopmans et al, 2014, 2016).

Moreover, the internal consistency estimates for the three-factor IWPQ model were calculated using the Cα and CR. This was done to ensure that the instrument is reliable within the sample and suitable for use in the local financial work environment. The findings showed that Cα values ranged from 0.897 to 0.943 whereas the CR values ranged from 0.898 to 0.943. In respect of the threshold of 0.70 for Cα and CR (Hair et al, 2014; Nunnally & Bernstein, 1994), the findings demonstrated an excellent internal consistency in capturing respondents perceived JP in the Ghanaian financial work environment. This finding converges with the reported reliability values in the erstwhile literature which ranged between 0.68 and 0.99 (Dwiliesanti & Yudiarso, 2022; Kenig, 2022; Kulachai et al, 2023; van der Vaart, 2021).

Furthermore, researchers determined the fitness and construct validity (convergent and discriminant) of the three-factor IWPQ solution within the sample. The findings revealed acceptable fit indices for the model, implying that the three-factor solution fitted perfectly to the sampled data. The findings also indicated that the measured instrument had sufficient convergent validity. This was evident in the obtained AVE values and factor loadings, which were all deemed higher than the suggested threshold in the extant literature (Hair et al, 2014; Fornell & Larcker, 1981). Similarly, adequate discriminant validity of the latent variables in the IWPQ instrument was achieved. This was evident in the square roots of the AVE (values on the diagonal) which were all considered to be larger than those recorded in the correspondent inter-construct relations (values off the diagonal) (Fornell & Larcker, 1981). This shows that the three factors in the model are related but remain distinct components of the JP construct. Moreover, the findings shows that the three-factor solution is valid and reliable within the sampled employees. Correspondingly, prior literature has reported sufficient fitness, convergent and discriminant validity of the IWPQ instrument in diverse work context (Kenig, 2022; Koopmans et al, 2016; Ramos-Villagrasa et al, 2019; van der Vaart, 2021).

Although 14 items out of the original 18 items were confirmed in this study, the findings generally indicated that the JP framework along with the IWPQ instrument introduced by Koopmans et al (2011, 2013a) was reliable and valid within the sampled data. Thus, based on the preliminary findings, it seems sufficient to say that the three-factor JP model have adequate utility for employees in the sampled Ghanaian financial work context.

7. Conclusion

The researchers found evidence supporting a three-factor solution with 14 items within the sampled employees working in a Ghanaian financial work environment. The findings confirmed the three-factor JP model had a perfect fit to the data with evidence of sufficient construct reliability and validity. Consequently, the study

concludes that practitioners and academics can use the short but generic self-report IWPQ instrument to examine and understand employees' JP related behaviours within the understudied financial institution.

8. Limitation and Recommendation for Future Research

This preliminary study contributes to the JP literature in two ways. First, the findings show that the JP construct can be measured comprehensively with three related but distinct factors thereby supporting the multidimensional conceptualisation and measurement of the construct using the IWPQ (Koopmans et al, 211, 2013a). Second, the findings reveal that the multifactor IPWQ instrument is applicable within the sample, a different cultural context. Further highlighting the robustness of the IWPQ in comprehensively capturing employees JP in the understudied financial work context. This agrees with the literature that suggests that the IPWQ can be used to evaluate employees' JP in specific jobs or different kinds of jobs in all organisations (Koopmans, 2015; Koopmans et al, 2016).

Nonetheless, the study was confined to sampled employees in a Ghanaian financial institution. Consequently, the findings should be interpreted with some restraint. Moreover, four items representing the CP and CWB subscales did not fit the data. This could be due to cultural context, wording, or response bias. That is, the IWPQ was developed in the Netherlands which is different from the Ghana's socio-cultural, economic and organisational context. Consequently, the participants may have attached different meaning to those items other than originally intended. This corresponds with Koopmans' (2015) suggestion that the meaning assigned to items in the IWPQ may differ in different work and socio-cultural settings. Future studies could address these shortfalls by including larger samples from different organisations across Ghana along with rephrasing the items to fit the socio-cultural contexts. This could provide insight on JP behaviours of employees in different Ghanaian organisations thereby improving the external validity and relevance of IWPQ in the multicultural Ghanaian work environments.

Ethics Declaration

Ethical clearance for this study was given by the participating institution (Ref: 1190) and the research was voluntary, anonymous, confidential, with participants' informed consent.

AI Declaration

We declare that no AI tool was used in this study.

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