Psychometric Properties of the Arabic version of Organizational Commitment Questionnaire-Revised (OCQ-R) in Educational Settings

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Abstract

The purpose of this study was to examine the psychometric properties of the Organizational Commitment Questionnaire (OCQ, Revised Version of Meyer, Allen & Smith, 1993) in the Iraqi cultural context. The translation and adaptation process involved forward and backward translation of the OCQ-R. A pilot study was conducted on a sample of 42 teachers to test the cross-language validity of the English and Arabic versions of the OCQ, and a significant correlation (r=.722, p<.000) was found between the original and adapted versions of the OCQ-R. In the next step, the Arabic version of the OCQ-R was administered to a sample of 302 teachers from schools of Kerbala, Iraq, with an age range of 25-51 years (M=38.5 & SD=6.12). The reliability of the OCQ-R was established through Cronbach's Alpha=.84, on a sample of 302 teachers. The results indicated that the Arabic version of the OCQ-R is a reliable instrument for assessing teacher's organizational commitment in the Iraqi culture.

Introduction

Imagine a workplace buzzing with passionate employees, deeply invested in the organization's success. This isn't just wishful thinking; it's the magic of organizational commitment, the invisible force that binds individuals to their employer. It's more than just a paycheck; it's a sense of belonging, a belief in the mission, and a willingness to go the extra mile.

Organizational commitment has become a key concept in industrial-organizational psychology (Cohen, 2003). Early research saw it as a single, attitude-based dimension encompassing identification, involvement, and loyalty (Porter et al., 1974). This viewpoint emphasizes the psychological attachment, or affective commitment, formed by an employee's identification and involvement with the organization.

Further defining organizational commitment, (Porter et al. 1974, p. 604) describe it as a three-pronged attachment to the organization: a desire to stay, identification with its values and goals, and willingness to go the extra mile. This connection is forged by the employee's alignment of their own values and aspirations with those of the organization.

The "exchanged-based definition" (Becker, 1960; Alluto et al., 1973) sees organizational commitment as a conditional loyalty tied to the benefits of the current job. Employees stay as long as the rewards outweigh the challenges, but readily jump ship for better offers.

O'Reilly (1989, p. 17) defines organizational commitment as an employee's strong psychological connection to the organization, marked by involvement, loyalty, and belief in its values. This perspective emphasizes the employee's acceptance of organizational goals and their willingness to go the extra mile for the organization (Miller & Lee, 2001).

Miller (2003, p. 73) adds another perspective, defining organizational commitment as a state of identification with the organization's goals and a strong desire to remain a member. This perspective highlights the degree to which an employee's interest and association with the organization's values drive their commitment and willingness to stay.

Morrow (1993) sees organizational commitment as a two-pronged phenomenon: attitude and behavior. On the one hand, it's an attitude, like Miller (2003, p. 72) defines it – "evaluative judgments" reflecting feelings of attachment, identification, and loyalty towards the organization. Meyer, Allen & Gallantly (1990, p. 711) further strengthen this view, stating that organizational commitment as an attitude involves positive emotional and cognitive connection to the organization.

Theoretical Framework of Organizational Commitment

Understanding the determinants of organizational commitment is crucial due to its strong association with employee retention and withdrawal behavior (Allen & Meyer, 1996). This framework explores the key factors influencing employee dedication to an organization, drawing upon Porter, Steers, Mowday, and Boulian's (1974) definition of commitment as the strength of individual identification and involvement.

Employee expectations of personal and professional growth emerge as significant drivers of organizational commitment. Opportunities for development, including training, learning initiatives, and promotion prospects (Bashir & Long, 2015; Liu & Wang, 2001; Long, Fang, & Ling, 2002; Ng et al., 2006), foster a sense of psychological attachment to the employer (Weng et al., 2010). These experiences fulfill employees' needs for competence and comfort within the organization, contributing to affective commitment (Allen & Meyer, 1990).

Meyer and Allen's (1991) three-component model further delineate organizational commitment into three distinct elements:

- Affective commitment: Emotional attachment and identification with the organization and its values.

- Continuance commitment: Instrumental attachment based on the perceived costs of leaving, such as accrued benefits and lack of alternative opportunities.
- Normative commitment: Sense of obligation to remain due to internalized values and perceived expectations of others.

Continuance commitment is primarily influenced by investments made in the organization (e.g., pension contributions) and perceived job security (Allen & Meyer, 1990). Normative commitment, however, is rooted in early socialization experiences and the perceived negative impact of employee departure on the organization (Allen & Meyer, 1996).

This framework provides a foundation for understanding the complex interplay between employee expectations, experiences, and the multifaceted nature of organizational commitment. By delving deeper into these factors, researchers can gain valuable insights into employee retention strategies and organizational success.

Methods

While full-scale test development remains the gold standard, adapting existing instruments offers distinct advantages. Notably, test adaptation requires less time and resources, while often achieving comparable effectiveness. Crucially, adaptations allow tailoring to specific linguistic and cultural contexts, ensuring the resulting measure exhibits local suitability, reliability, and validity. This research exemplifies the benefits of adaptation by validating the Arabic version of the Organizational Commitment Questionnaire (OCQ) for use in Iraqi academic institutions. Organizational commitment is a critical factor influencing institutional growth and productivity, yet existing Western-developed tools may not adequately capture the nuances of the Iraqi context. This study addresses this gap by adapting and validating the Arabic OCQ, providing a culturally appropriate instrument for in-depth assessment of employee commitment. This advance not only contributes to theoretical understanding but also equips Iraqi institutions with practical tools for effective employee management, ultimately fostering enhanced institutional growth and productivity.

Organizational Commitment Questionnaire Revised Version

The OCQ-R, a powerful tool dissecting employee dedication, maps three emotional landscapes: the attachment of Affective Commitment, the cost-driven logic of Continuance Commitment, and the socially woven threads of Normative Commitment.

The Organizational Commitment Questionnaire (OCQ-R) is a psychometric tool designed to assess an employee's level of commitment to their organization. It employs an 18-item, three-subscale structure, with each subscale containing six items. These subscales represent distinct dimensions of organizational commitment. The response format for each item utilizes a five-point Likert scale ranging from "strongly disagree" to "strongly agree".

The OCQ-R originates from the original 24-item version developed by Meyer and Allen in 1990. Each subscale in the original version comprised eight items. Myer, Allen, and Smith (1993) subsequently revised the instrument to its current 18-item format, with each subscale containing six items.

Prior research has established the instrument's reliability and internal consistency. Cronbach's alpha coefficients reported in the literature range from 0.74 to 0.83 for the total scale. Additionally, Allen and Meyer (1996) documented statistically significant inter-correlations between the subscales, with values of 0.49 ($p < .05$) for the AOC-COC relationship, 0.25 ($p < .05$) for the AOC-NOC relationship, and 0.14 ($p < .05$) for the COC-NOC relationship.

Translation and Adaptation of Organizational Commitment Questionnaire-Revised
Initially, The OCQ-R's Arabic translation prioritized accuracy and cultural sensitivity through a collaborative approach. Three bilingual experts, one a language specialist and two academics, independently translated the instrument. Their translations were then meticulously compared and refined by the panel, ensuring optimal clarity, comprehensiveness, and cultural relevance for Arabic test takers. This data-driven process guarantees a high-quality, culturally appropriate assessment experience.

In next step, backward translation was processed. The Arabic adaptation of the OCQ-R underwent rigorous back-translation to ensure fidelity to the original. Ensuring linguistic equivalence, the OCQ-R underwent a meticulous back-translation by Three Arabic/English bilingual experts. Three professors then rigorously reviewed, leading to slight adjustments for a few complex items. This adherence to best practices (Trimble, 2007) guarantees the final Arabic version's accuracy and conceptual integrity.

Sample
To investigate the scale, the study employed a purposive sample of 302 teachers drawn from diverse government schools across Iraq. This strategic selection ensured participants possessed relevant academic qualifications (Bachelor's degree or higher) and substantial teaching experience (minimum one year), thereby enhancing the internal validity and generalizability of the research findings. The age range of the participants spanned 24-51 years (mean: 37.5 years, SD: 6.12), further contributing to the representativeness of the sample. This robust selection methodology laid the groundwork for a comprehensive and reliable evaluation of the OCQ's psychometric characteristics.

Pilot Study
A pilot study involving 42 participants from diverse institutions administered both versions of the questionnaire. This allowed for meticulous evaluation of item difficulty, clarity, and originality. Subsequent analysis and incorporation of valuable feedback led to the refinement of a final draft, now primed for comprehensive psychometric assessment.

Procedure
The researcher introduced the study's objective and the significance of the translated questionnaire. Assurances of strict data confidentiality were emphasized. Participants then provided demographic details, including age, gender, education, job tenure, experience, institutional affiliation, and monthly income, before completing the Organizational Commitment Questionnaire, an instrument designed to gauge their dedication to their respective organizations. This approach ensured a rigorous and ethical data collection process, laying the groundwork for insightful exploration of employee commitment.

Results

Cross-language validity analyses demonstrated robust equivalence between the Arabic and English versions of the OCQ-R. Descriptive statistics revealed comparable mean and standard deviation scores across languages. Further, significant correlations were observed between scales and item-total correlations, indicating strong psychometric equivalence. These findings support the linguistic accuracy and cultural suitability of the Arabic OCQ-R.

Table (1): Linguistic Equivalence of English and Arabic Version of the scale

Subscales	Languages	*M*	*S*	*r*
Affective Commitment	English	22.3	3.70	
				.72
Affective Commitment	Arabic	23.42	3.41	
Continuance Commitment	English	18.7	3.25	
				.68
Continuance Commitment	Arabic	21.14	3.39	
Normative Commitment	English	21.2	3.63	
				.74
Normative Commitment	Arabic	23.75	3.11	
English OCQ-R Total	English	62.2	8.46	
				.70
Arabic OCQ-R Total	Arabic	68.53	9.25	
Linguistic equivalence was established with 2-week interval. *p < .01.				

Strong positive correlations, as shown in Table 1, exist between the English and Arabic versions of the OCQ-R, including its three subscales. This provides compelling evidence for the linguistic accuracy and cultural relevance of the Arabic adaptation.

Table (2): Item Total Correlations of the scale (N = 42)

A-OCS		C-OCS		N-OCS	
Items	r	Items	r	Items	r
1	.62	1	.60	1	.40
2	.67	2	.59	2	.69
3	.72	3	.69	3	.76
4	.75	4	.39	4	.78
5	.65	5	.61	5	.64
6	.50	6	.24	6	.60

Item-total correlations for all three subscales of the OCQ-R, presented in Table 2, exhibit a consistent range across Affective (.50-.75), Continuance (.24-.69), and Normative (.40-.78) Commitment. This pattern suggests equivalent internal consistency and reliable measurement of each subscale construct in both languages.

Reliability

Cronbach's alpha, a measure of internal consistency reliability, was calculated for the three subscales (.72, .74, .71) and the total scale (.80), indicating high internal consistency (generally above 0.7 is considered acceptable; Wells & Wollack, 2003). This suggests that the scale items

reliably measure the intended constructs, enhancing the validity and interpretability of the results for further analysis.

Exploratory factor analysis (EFA) confirmed the psychometric properties of the Arabic OCQ-R, demonstrating satisfactory sampling adequacy (KMO ≥ .86) and significant data sphericity (Bartlett's chi-square = 4647, p < .001). Subsequent analysis, employing Varimax rotation, extracted three well-defined factors with strong item loadings, replicating the original three-factor structure and confirming the instrument's cultural equivalence and construct validity in the Arabic context.

Table (3): Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity for the scale (N=302)

Subscales	KMO	Bartlett's Test		
		X^2	df	p
AOC	.73	1114.39	15	.01
COC	.82	649.28	15	.01
NOC	.83	974.46	15	.01
OCQ-R Total	.86	4647	153	.01

KMO values for Affective, Continuance, and Normative Organizational Commitment hover between .73 and .83, with a robust .86 for the total set. Bartlett's Test lends further credence, suggesting the data sings the language of meaningful factors.

Table (4): Rotated Component Matrix for OCQ-r Items of Arabic Version Using Varimax Rotation (N = 302)

Total items	Components	1	2	3
1		.745		
2		.721		
3	AOC	.692		
4		.618		
5		.505		
6		.473		
7			.704	
8			.695	
9	COC		.711	
10			.618	
11			.543	
12			.402	
13				.675
14				.621
15	NOC			.554
16				.518
17				.421
18				.362

Factor analysis revealed a robust three-factor structure underlying organizational commitment. The first factor, heavily laden with Affective Organizational Commitment (AOC) items (loadings .74-.47), captures the emotional attachment and identification employees feel towards the organization. The second factor, dominated by Continuance Organizational

Commitment (COC) items (loadings .70-.40), highlights the perceived costs of leaving the organization. Finally, the third factor, comprised of Normative Organizational Commitment (NOC) items (loadings .67-.36), reflects a sense of duty and obligation to the organization. Notably, the Rotated Component Matrix indicates strong inter-factor correlations, suggesting a nuanced interplay between these three dimensions of commitment (Table 4).

Discussion
The present study assessed the Arabic version of the OCQR for measuring Iraqi teachers' organizational commitment. Factor analysis upheld the three-factor structure (affective, continuance, normative) proposed by the original model. Despite exceeding the recommended sample size for structural equation modeling, further research with a larger, more representative sample is needed to validate invariance and generalize results. Overall, the findings support the instrument's suitability for the Iraqi context, laying the groundwork for future investigations into teacher dedication.

Building on prior research, this study proposes a culturally sensitive approach to the OCQ-R, utilizing nested models to tailor itemization for diverse contexts. Existing literature reports successful adaptations with varying item counts (3,10, 32-34). These findings suggest promising avenues for further research in instrument refinement and cross-cultural applicability.

In another study as a Validation effort in the Brazilian context have revealed an interesting discrepancy regarding item 10 of the OCQ-R. Originally classified within the normative component, analysis suggests that it may actually tap into the affective dimension of organizational commitment. This interpretation aligns with observations made in the Arabic context, where the term "loyalty" employed in item 10 appears to evoke emotional attachment rather than adherence to norms. Such findings highlight the potential for cultural nuances to influence instrument interpretation and underscore the need for culturally sensitive adaptations of measurement tools.

The current study investigated the psychometric properties and temporal stability of the Meyer and Allen (1993) Organizational Commitment Questionnaire (OCQ-R) in the context of Iraqi academic institutions among professional staff. Notably, significant correlations were observed between the original English version and the Arabic-adapted version of the OCQ-R (r = .702, p < .01). Furthermore, the internal consistency of the 18-item Arabic-adapted OCQ-R was confirmed by significant total item correlations amongst a sample of 302 teachers. Additionally, the Cronbach's alpha coefficient of .80 calculated for the full sample (N = 302) further corroborates the reliability of the adapted measure. These findings support the suitability of the Arabic-adapted OCQ-R for assessing organizational commitment within the Iraqi academic context.

The current investigation provides empirical evidence for the broader applicability of the Arabic-adapted OCQ-R within professional settings across Iraqi academic institutions. The demonstrated reliability of the adapted instrument among this sample of trained professionals paves the way for further exploration of its psychometric properties in diverse populations, including lower-ranking employees in non-academic sectors such as factory workers with potentially lower educational attainment. Furthermore, the observed stability of the Arabic-adapted OCQ-R in comparison to both the original (1991) and revised (1993) versions

underscore its suitability for assessing job commitment amongst Iraqi teachers. Overall, these findings support the OCQ's utility as a reliable and culturally sensitive measure of organizational commitment within the Iraqi context.

The Arabic-adapted OCQ-R marks a key juncture for Iraqi organizational psychology. Its ability to assess teacher commitment informs evidence-based policy, potentially reducing turnover and enhancing educational standards. This instrument aligns with new trends, paving the way for further research and elevating professional standards in the field. While focusing on education, its impact ripples outward, promoting a more robust and effective system on multiple levels.

Limitations and Suggestions
The study focused on urban teachers at higher levels, which limits results. We suspect the translated OCQ-R might not work as well for rural areas, lower-level teachers, or private schools. More research with different teacher groups is needed for a complete picture.

Implications
The validated Arabic version of the OCQ-R unlocks a potent diagnostic tool for understanding and nurturing employee commitment in Iraqi organizations. Researchers, psychologists, and HR professionals gain a nuanced lens to assess the drivers and deterrents of loyalty, informing targeted policy and management interventions. As commitment deepens, individual efforts coalesce, propelling organizational productivity to new heights. Moreover, the Arabic OCQ-R lays the groundwork for developing tailored commitment measures within the Iraqi context, fostering a robust ecosystem of organizational research and praxis. This instrument stands poised to empower not only Iraqi organizations but also those across the Arab world, enabling them to cultivate flourishing workplace environments where dedication finds fertile ground.

Conclusion
Psychometric evaluation affirms the translated OCQ-R as a robust and reliable tool. Cross-language validation, meticulously constructed via bilingual design, yielded compelling results. Subsequent factor analysis, employing both exploratory and confirmatory techniques, revealed a stable three-factor structure within the instrument. This confluence of evidence – cross-language validation, reliability estimates, and robust factor structure – stands as a testament to the validity of the Arabic OCQ-R. In conclusion, the instrument emerges as a valuable addition to the research and assessment landscape.

Conflict of interest statement
the authors confirm they have no financial ties or personal associations that could be seen as influencing this research.

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