



## Development and Validation of Organizational Citizenship Behavior Questionnaire

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### Abstract

*The purpose of this study was to develop and validate an organizational citizenship behavior questionnaire. A 30-item questionnaire with five categories was created after a thorough literature analysis of the foundational studies and models on organizational citizenship behavior. Expert opinions were used to guarantee the questionnaire's content validity. 90 teachers from public universities participated in a pilot research to provide input on the reliability, comprehension, and clarity of the language. The questionnaire's validity was demonstrated by its alpha level of 0.72, which was based on data from pilot testing. The researchers later gathered data from 1255 teachers from public universities in Lahore. The five dimensions' alpha reliability ranged from 0.83 to 0.88, while the 30 items' overall internal consistency was 0.95. Exploratory factor analysis produced five subscales such as Conscientiousness, Sportsmanship, Civic Virtue, Courtesy, and Altruism. All five of the questionnaire's dimensions showed significant positive relationships with one another. Confirmatory factor analysis confirms that the items are highly reliable indicators of their respective constructs, providing strong evidence of scale validity. The findings suggested evidence of validity and reliability of the Organizational Citizenship Behavior questionnaire that can be used in university settings.*

**Keywords:** *Organizational Citizenship Behavior, Conscientiousness, Sportsmanship, Civic Virtue, Courtesy, Altruism*



## **Introduction**

Organizational Citizenship Behavior is defined as acts of voluntary behaviors that are not a part of the formal job requirements, increasing efficiency and effectiveness of an organization without being linked to any formal rewards (Qian et al., 2020; Organ et al., 2005). Organ (1988) coined Organizational Citizenship Behavior to refer to such discretionary, voluntary behavior that is neither officially rewarded nor officially demanded but is critical to the efficiency and performance of the organization. OCB brings into play the unused resources in organizations and this makes systems to have been made more efficient and competitive. Organizational Citizenship Behavior has become a major subject of research in the field of organizational behavior because of its high influence on organizational performance (Zhang & Song, 2020; Podsakoff et al., 2000). It adds to the increased productivity, the improved use of resources, lowering of costs, and increasing the attractiveness of the organization (Cohen & Vigoda, 2000; Danish et al., 2014). High OCB organizations do better than others because these behaviors indicate a desire to go beyond expectations and achieve excellence (Robbins & Judge, 2009). Such behaviors are voluntary and are not forced, but serve the needs of the organization (Rostiawati, 2020; Affandi et al., 2021). OCB usually consists of the work outside of the working hours and is an individual decision that facilitates the efficient running of the organization (Ambarwati et al., 2024).

The main objective of the study is to develop a questionnaire which will explain different dimensions of corporate citizenship behaviour. The authors of the research offered a model of organizational citizenship behaviour that was applied to the present study to create and confirm the organizational citizenship behaviour questionnaire. This model contains the most critical aspects of corporate citizenship behaviour in Pakistani setting.

## **Review of Literature**

Although OCB offers several benefits to the organization, its dimensions can differ depending on the culture of the country. Organizational Citizenship Behavior (OCB) has evolved through different conceptual models. Smith, Organ & Near (1983) proposed the earliest empirical model of OCB, which categorized behaviors into two main dimensions that altruism and Generalized Compliance. Organ (1988) proposed that OCB consists of five distinct but related dimensions that go beyond formal job requirements that are Altruism, Conscientiousness, Sportsmanship, Courtesy, and Civic Virtue. Williams and Anderson (1991) have also divided OCB into two types, including behavior that is directed at the individual (OCBI) and organization (OCBO) level. Podsakoff and MacKenzie (1994) identified important types of OCB that were sportsmanship (not filing unnecessary complaints), civic virtue (participation in organizational processes), and helping behaviors (helping colleagues and solving conflicts). Such practices increase the performance of the groups and organizations (Podsakoff et al., 1997). Moorman and Blakely (1995) proposed a four-dimensional model that included Interpersonal-Helping, Individual-Initiative, Personal Industry, and Loyal Boosterism. Podsakoff and colleagues (2000) identified seven common dimensions of OCB that were Helping behavior, Sportsmanship,



Organizational loyalty, Organizational compliance, Individual initiative, Civic virtue, and Self-development. Organ and Colleges (2006) introduced a six-dimensional model encompassing assistance, sportsmanship, organizational fealty, organizational compliance, individual initiative, and self-improvement.

Scholars discovered nearly 30 facets of OCB based on the many research studies (Podsakoff et al., 2000; Kolachi et al., 2024). They decided that Organ (1988) had emphasized the most significant points that have mostly covered nearly distinct labels for every dimension. These include: civic virtue, courtesy, altruism, sportsmanship, and conscientiousness (Sajid & Akhtar, 2020), and were finally selected for the instrument development.

### **Conscientiousness**

One of the fundamental dimensions of Organizational Citizenship Behavior (OCB) is conscientiousness, which is the voluntary behavior that is beyond the job expectations and is the behavior that displays reliability, responsibility, and diligence (Organ, 1988; Borman et al., 1997). It also involves behaviors like punctuality, observing rules, taking care of break times, and keeping order in the organization (Kwan, 2006; Ozturk, 2010). It is an impersonal trait, unlike altruism, that focuses on certain individuals and focuses on consistency and reliability (Ambarwati et al., 2024). It has been noted in research that conscientious employees do not need much supervision, they are very productive, and they enhance efficiency in the organization as they perform beyond the minimum performance norms (Podsakoff et al., 2000; Furnham & Cheng, 2024; Oad et al., 2024). These workers are goal-oriented, task-oriented, and have the impulse control that results in organizational reliability and success (John & Srivastava, 1999; Toegel & Barsoux, 2012). In general, conscientiousness demonstrates the readiness of an employee to perform a step further than the duty and increase personal and organizational efficiency (Ocampo et al., 2018; Aliyu & Gebremeskel, 2024).

### **Sportsmanship**

It describes the capability of employees to accept inconveniences, disruptive, and less-than-ideal workplace conditions without unjustified complaints and negative attitudes (Organ, 1988). Sportive workers have a positive attitude, do not engage in insignificant criticism, and are more oriented towards collaboration, which thus relieves leaders of some pressure and makes the working environment more harmonious (Podsakoff & MacKenzie, 1997; Kwong, 2006; Ambarwati et al., 2024). This behavior not only makes organizations more efficient and flexible but also elevates team morale, builds loyalty, minimizes turnover, and leads to overall organizational effectiveness (Podsakoff et al., 2000).

### **Civic virtue**

It is an expression of the responsible participation and interest of the employees in the life and well-being of the organization (Organ, 1988). It entails voluntary actions like keeping oneself updated with changes in the organization, participation in meetings, constructive suggestions, and involvement in decision-making and policy formulation (Deluga, 2006; Ozturk, 2010). A



civilly virtuous employee considers themselves to be a part of the organization, and they are committed to the organization's objectives, image, and long-term success (Redman & Snape, 2005; Organ et al., 2006). These actions allow organizational effectiveness as they enhance accountability, flexibility, and a good organizational image (Borman et al., 2001; Kwong, 2006).

### Courtesy

It aims at trying to avert issues and also uphold proper work relations. It is achieved through voluntary efforts like giving prior notice, information exchange, reminding others of tasks, and making efforts to prevent causing trouble to others (Kwong, 2006). In contrast to altruism, which responds to the problems that already exist, courtesy is focused on prevention, the minimization of the chances of conflicts and misunderstandings. Courteous employees are emphatic, coordinated, and considerate of other people and thus reduce interpersonal conflicts and save time that otherwise would be used in resolving conflicts (Ozturk, 2010). The courtesy improves the flexibility of the organization and its overall performance by enhancing interactions and a decrease in tension in the workplace (Podsakoff et al., 2000).

### Altruism

It is a voluntary action that is carried out to assist other people with work or organizational difficulties. It shows the readiness of employees to help people, colleagues, and supervisors, even though this kind of help is not obligatory (Organ, 1988; Ambarwati et al., 2024). This can be in the form of helping overworked colleagues, mentoring new employees, doing their job on behalf of absent colleagues, or giving advice and training to the less experienced employees (Smith et al., 1983). Altruistic behavior enhances cooperation, teamwork, and organizational flexibility, which in the end, leads to high productivity (Podsakoff et al., 2000). Altruism is driven by the unique wish to assist others instead of self-enrichment (Feigin et al., 2014). It is thus an important part of facilitating teamwork and maintaining productivity in organizations.

Table 1

<i>An overview of the dimensions of organizational citizenship behavior and Their Sources</i>	
Dimensions	Source
Conscientiousness	<a href="#">Hidayati &amp; Ramadhani (2024)</a> , <a href="#">Heng &amp; Chang (2022)</a> , <a href="#">Ashton &amp; Lee (2009)</a> , <a href="#">Furnham, A., &amp; Cheng, H. (2024)</a> , <a href="#">Franzen et al (2022)</a> , <a href="#">Aliyu &amp; Gebremeskel (2024)</a> .
Sportsmanship	<a href="#">Lee &amp; Allen (2002)</a> , <a href="#">Omran (2010)</a> , <a href="#">Nwogbo &amp; Ugwuoke (2021)</a> , <a href="#">Ozsari &amp; Altin (2021)</a> , <a href="#">Aliyu &amp; Gebremeskel (2024)</a> .
Civic Virtue	<a href="#">Muthuraman &amp; Al-Haziazi (2017)</a> , <a href="#">Gabriel (2015)</a> , <a href="#">Graham &amp; Van Dyne (2006)</a> , <a href="#">Aliyu &amp; Gebremeskel (2024)</a> .
Courtesy	<a href="#">Lee and Allen (2002)</a> , <a href="#">Gabriel (2015)</a> , <a href="#">Lee &amp; Ha-Brookshire (2018)</a> , <a href="#">Khalili (2017)</a> , <a href="#">Aripin. &amp; Ali (2022)</a> .
Altruism	<a href="#">Johnson (2023)</a> , <a href="#">Adhiatma &amp; Fachrunnisa (2021)</a> , <a href="#">Nwogbo &amp; Ugwuoke (2021)</a> , <a href="#">Sliwak &amp; Bartczuk, (2023)</a> , <a href="#">Emilisa, N. (2019)</a> , <a href="#">Aripin. &amp; Ali (2022)</a> , <a href="#">Batool et al (2019)</a> , <a href="#">Kibe &amp; Ndege (2023)</a> .



## **Theoretical Framework**

This research utilizes social exchange theory to elucidate the reasons behind employees' voluntary participation in organizational citizenship behaviors that improve organizational effectiveness. This approach holds that employee behavior is determined by an exchange relation. Work-related obligations are not the only social relationships. Such interactions among the employees and their leaders create mutual respect, appreciation, and loyalty. OCB amongst employees is facilitated in an organization where the quality of relationships depends on social encounters. The social exchange workers must reciprocate with the use of OCB. In simple terms, in a relationship that entails a social exchange, employees will be more inclined to engage in OCB (Deluga, 1994; Pillai et al., 1999; Aryee et al., 2002).

## **Instrument Development**

Following a comprehensive investigation of the literature research about extant scales and prior studies on organizational citizenship behavior, a preliminary set of 54 items was developed. The scale was condensed to 30 items following the elimination of ambiguous, double-meaning, or unclear questions (Hinkin, 1998). The final instrument comprised five dimensions: Conscientiousness, Sportsmanship, Civic Virtue, Courtesy, and Altruism, with each dimension containing six items. A five-point Likert scale with the following values: strongly agree = 5, agree = 4, neutral = 3, disagree = 2, and strongly disagree = 1.

The draft questionnaire was checked by the experts to determine the content validity. Feedback was obtained that helped in refining item wording, making sure that every dimension was covered, and helped in removing ambiguity. Readability of instructions, ease of completion, time taken, and preliminary reliability were further evaluated by a pilot study that involved a small representative sample through the Cronbach alpha.

## **Sample**

1255 randomly selected university instructors from 11 public universities in Lahore made up the study sample. A sample size of 300 is considered good, 500 is considered very good, and 1000 or more is considered exceptional (Comrey & Lee, 1992). 1255 observations of this research data can be sufficient for factor analysis.

## **Data Collection**

The researcher contacted faculty members and requested that they complete the questionnaire. The teachers were notified of the research's purpose and assured of the confidentiality of the information. The researcher subsequently employed the questionnaires to collect data. The study raised no ethical issues, and participants were assured that their responses would remain entirely confidential and would not be disclosed to any higher authorities. To ensure that teachers may fill out the questionnaires without worrying about the data confidentially being compromised, the demographics did not include the identities of the teachers or the universities.

## **Results**



The reliability of the OCBQ was assessed using Cronbach's Alpha, the most widely used scale reliability measure (Field, 2009). Results of the study are presented in Table 2. The researchers employed all 30 items of the instrument to assess internal reliability, aiming to develop a consistently reliable tool for measuring organizational citizenship behavior. Cronbach's alpha reliability for the OCBQ was notably high ( $\alpha = .95$ ), with values of 0.86 for Conscientiousness (6 items), 0.84 for Sportsmanship (6 items), 0.83 for Civic Virtue (6 items), 0.88 for Courtesy (6 items), and 0.88 for Altruism (6 items). Acceptable values are those over 0.70. Internal consistency is interpreted as high (0.80 and above), medium (0.50-0.79), or weak (0.20-0.49) (Pett et al., 2003; Skeran, 2003). Since all values exceed the .80 threshold, the scale is considered highly reliable.

Table 2

Reliability of Organizational Citizenship Behavior Questionnaire Dimension-Wise

	Dimensions	Items	Items_Included	Reliability
1	Conscientiousness	6	1, 2, 3, 4, 5, 6	.86
2	Sportsmanship	6	7, 8, 9, 10, 11, 12	.84
3	Civic Virtue	6	13, 14, 15, 16, 17, 18	.83
4	Courtesy	6	19, 20, 21, 22, 23, 24	.88
5	Altruism	6	25, 26, 27, 28, 29, 30	.88
	overall	30		.95

Following the computation of the reliabilities, the correlations among the five OCBQ factors were also calculated. To verify that the five components were distinct from one another and avoid significant redundancy, the interactions between these elements were measured (Messick, 1989). The findings showed that every component of OCBQ was positively and significantly correlated, confirming that they are related yet distinct aspects of the construct. The strongest association was observed between Altruism and Courtesy ( $r = .79$ ) and between Conscientiousness and Sportsmanship ( $r = .79$ ). Altruism and sportsmanship, however, had the weakest positive association ( $r = .53$ ). The correlations are summarized in Table 3.

Table 3

Intercorrelations between OCBQ Component Measures

	Factors	1	2	3	4	5
1	Conscientiousness	1				
2	Sportsmanship	0.79 **	1			
3	Civic Virtue	0.72 **	0.77**	1		
4	Courtesy	0.62**	0.60**	0.75 **	1	
5	Altruism	0.58 **	0.53 **	0.66 **	0.79 **	1

The researchers made calculations on 30 items of paired combinations. The correlation matrix generated was suitable in factor analysis. Bartlett Test of Sphericity also obtained significant results, indicating the suitability of the correlation matrix to the factor analysis (  $\chi^2 (435) =$



46674.848,  $P < .001$ ). The Kaiser-Meyer-Olkin (KMO) value was .921, indicating good sampling adequacy and confirming that the sample size was sufficient for factor analysis. According to Field (2009), the KMO statistics range from 0 to 1. KMO values between 0.5 and 0.7 are considered poor, those between 0.7 and 0.8 are considered acceptable, those between 0.8 and 0.9 are considered great, and those beyond 0.9 are considered superb (Hutcheson & Sofroniou, 1999). PCA was run to study the factor loadings and the results showed five factors. This is done to determine the stability of the five parameters as well as the item loadings, which show similar trends (Field, 2009). Table 4 represents the Varimax results and the factor loading as a result of PCA. It indicates that Factor loadings are all above .70, which indicates strong item–factor relationships and supports the reliability and validity of the scale (Hair et al., 2019).

Table 4

Organizational Citizenship Behavior Questionnaire Factor Loading

Rotated Component Matrix						
		Component				
	Items	1	2	3	4	5
C1	Even when no one is looking, I always abide by the rules and regulations of the university.					.907
C2	I skipped meals and breaks to finish my work.					.921
C3	Giving an honest day's work for an honest day's pay is something I firmly believe in.					.924
C4	I am willing to work with dedication and am aware of the importance of being truthful at work.					.890
C5	I always have a tendency to act responsibly and with self-discipline.					.840
C6	To avoid rushing at the last minute, I plan and organize things.					.906
S1	When other staff members criticize the university, I always stand up for it.					.892
S2	I always take pride in speaking on behalf of my university.					.919
S3	I consistently provide suggestions to enhance the university's operations.					.909
S4	I always keep an open mind when I take advice and criticism from the head.					.912
S5	Even when things don't go as planned, I always keep a positive outlook.					.920



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S6	Without complaining, I am always willing to tolerate the imposition of work.	.876
CV1	I always stay up to date with the university's advancements.	.919
CV2	I always show that I understand and agree with the university's policies.	.941
CV3	I always read and stay up to date on university announcements, memos, and other materials.	.954
CV4	Meetings that are considered important but not required are always attended by me.	.954
CV5	I always offer suggestions for new initiatives or modifications to existing practices.	.923
CV6	I always offer ideas to others for improvements that could make things better.	.939
CU1	I always consider how my actions impact the work of other teachers.	.901
CU2	I always take precautions to keep my university safe from possible issues.	.938
CU3	I always let my coworkers know about any new information that could have an impact on them.	.943
CU4	I always try to avoid conflicts with other people at work.	.932
CU5	In order to prevent stress, I always treat people with respect.	.936
CU6	I always genuinely try not to cause issues for my coworkers.	.906
A1	I'm always willing to listen to someone who is having problems at work.	.906
A2	I'm always willing to lend a hand to people who have problems at work.	.895
A3	I would assist someone in need even if I didn't like them.	.913
A4	I always made time to mentor, coach, and offer advice to a colleague.	.871
A5	I have sympathy for coworkers at work.	.845
A6	I'm always willing to modify my university assignments and vacation schedule.	.725

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Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.





a. Rotation converged in 5 iterations.

To extract factors on the items was done using the varimax rotation method of Principal Component Analysis (Jolliffe, 2011). PCA relies on eigenvalues indicating the percentage of variance explained by the factors. All five components have eigenvalues above 1.0 in both rotated and initial solutions, indicating that they are retained as important factors. The first factor has 21.4% of the total variance in the first extraction, then 20.2% (factor 2), 16.7% (factor 3), 15.1% (factor 4), and 11.4% (factor 5), which has a cumulative variance of 84.8%. Factor 1 accounts for 18.4%, factor 2, 17.7%, factor 3, 16.8%, factor 4, 16.4% and factor 5, 15.5% after rotation, with the cumulative total factor accounting to 84.8%. The rotated values prove a more balanced and interpretable factor structure, which is in favor of the five-factor model of OCB (Table 5).

Table 5

Organizational citizenship behavior (Total Variance Explained)

Factors	Initial Eigenvalues			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.419	21.398	21.398	5.516	18.388	18.388
2	6.062	20.206	41.603	5.321	17.738	36.127
3	5.008	16.693	58.296	5.025	16.751	52.878
4	4.528	15.092	73.389	4.909	16.365	69.243
5	3.414	11.381	84.769	4.658	15.527	84.769

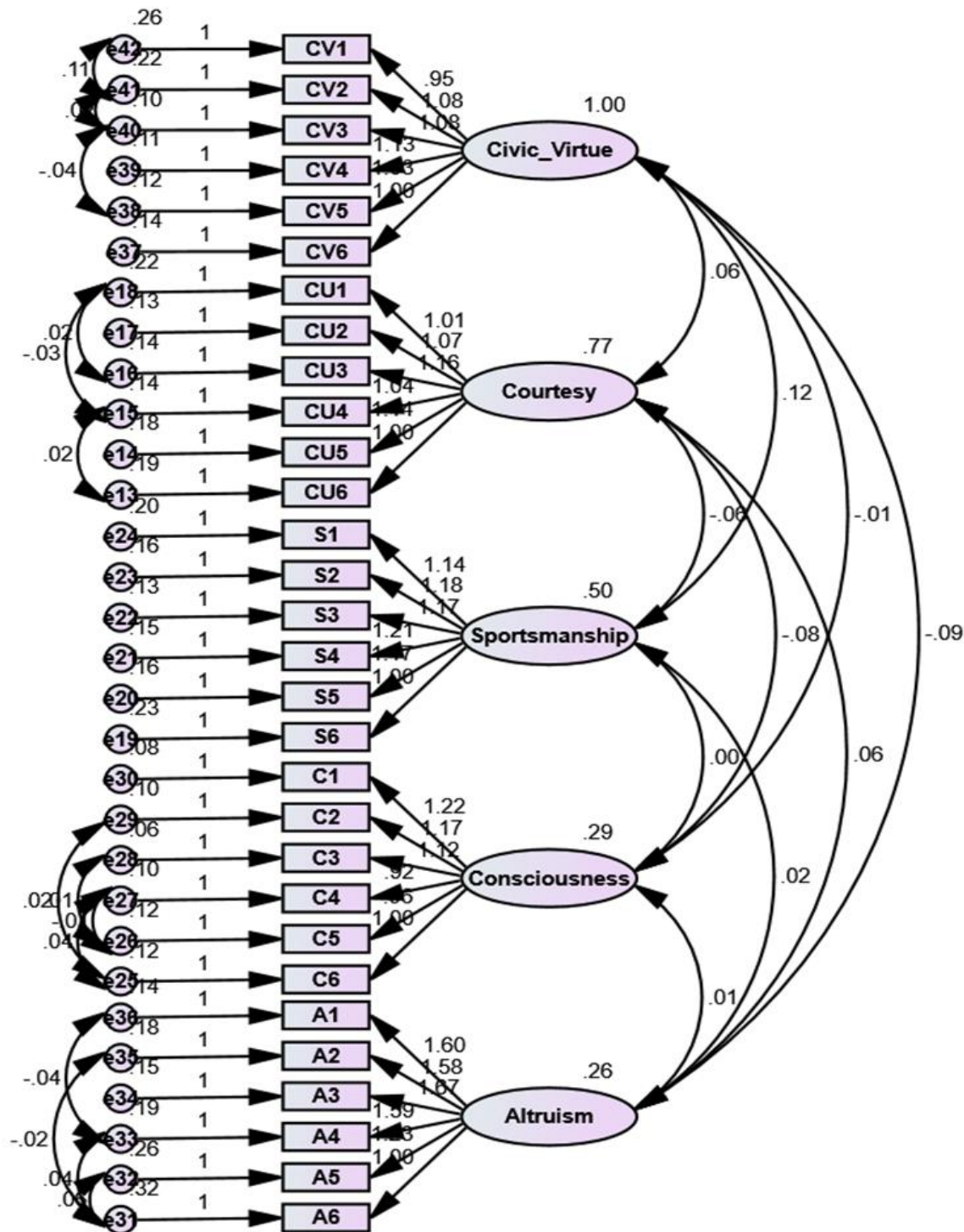
Extraction Method: Principal Component Analysis.



## **Confirmatory Factor Analysis of Organizational Citizenship Behavior Questionnaire**

*Figure 1*

*CFA for Organizational Citizenship Behavior Questionnaire*



Organizational Citizenship Behavior Questionnaire (CFA Results)



The results of the Organizational Citizenship Behavior (OCB) questionnaire's structural equation modeling (SEM) are shown in Figure 1. Each of the six indicators used to measure the five latent constructs Civic Virtue, Courtesy, Conscientiousness, Sportsmanship, and Altruism showed significant factor loadings. Civic Virtue items (CV1–CV6) loaded between .95 and 1.10, while Courtesy items (CU1–CU6) ranged from 1.01 to 1.10. Conscientiousness (C1–C6) showed loadings between 1.22 and 1.10, Sportsmanship items (S1–S6) ranged from 1.14 to .87, and Altruism (A1–A6) ranged from 1.60 to .83. These results prove that the measurement items are very reliable indicators of the respective constructs and provide good evidence of scale validity.

Table

Fit Indices of Organizational Citizenship Behavior Questionnaire

Fit Indices	Value
CMIN/ $\chi^2$ (Chi-square)	3590.652
DF	381
CMIN/DF	9.424
RMR(Root Mean Square Residual)	.059
GFI(Goodness of Fit Index)	.831
AGFI(Adjusted Goodness of Fit Index)	.794
RFI(relative fit index)	.931
TLI(Tucker–Lewis index)	.921
CFI(Comparative Fit Index)	.931
RMSEA(Root Mean Square Error of Approximation)	.082

The CFA results showed that the significance of the chi-square value was also high,  $\chi^2(381) = 3590.652$ ,  $p = .001$ , as observed in large samples (Kline, 2016). The relative chi-square ( $\chi^2/df$ ) was 9.42, which is greater than the recommended cutoff value of 5, implying an inappropriate parsimonious fit (Marsh & Hocevar, 1985). Root mean square residual (RMR = .059) was also below the recommended value of less than .08, which shows that residuals are small (Hu & Bentler, 1999). The goodness-of-fit index (GFI = .831) and adjusted goodness-of-fit index (AGFI = .794) were lower than a suggested cutoff of .90, indicating poorer absolute fit (Byrne, 2013). Conversely, incremental indices showed good fit, where the relative fit index (RFI = .931), Tucker-Lewis index (TLI = .921), and comparative fit index (CFI = .931) were all above the .90 criteria (Bentler, 1990; Hu & Bentler, 1999). The root mean square error of approximation (RMSEA = .082) was not as low as the desirable cutoff, which is .08, indicating a mediocre fit with a borderline acceptable fit (Browne & Cudeck, 1993). All in all, the model proved to be a moderate fit.

### Discussion and Conclusion

The present study aimed to develop and validate an instrument for measuring Organizational Citizenship Behavior (OCB), grounded in Organ's (1988) five-dimensional framework consisting of Conscientiousness, Sportsmanship, Civic Virtue, Courtesy, and Altruism. The findings strongly suggest the reliability and validity of the instrument. The Exploratory Factor



Analysis (EFA) identified a clear set of five factors, accounting for over 84 percent of the total variance. This provides evidence that the scale is effective in assessing the internal structure of OCB. The adequacy of the sample size and the appropriateness of the factor analysis were further confirmed by a Kaiser-Meyer-Olkin (KMO) measure of 0.921 and a highly significant Bartlett's test of sphericity ( $\chi^2 = 46,674.848$ ,  $df = 435$ ,  $p < .001$ ). The measurement model was reaffirmed through the application of Confirmatory Factor Analysis (CFA). The model fit measures ( $\chi^2/df = 9.424$ ,  $CFI = .931$ ,  $TLI = .921$ ,  $RMSEA = .082$ ,  $GFI = .831$ ,  $AGFI = .794$ ) fell within reasonable values (Hu & Bentler, 1999; Hair et al., 2019), which proved the condition of the observed data being well-fitted to the hypothesized five-dimensional structure. Also, all the standardized factor loadings were above the recommended .70 mark, which determined convergent validity (Fornell & Larcker, 1981). The correlations among the five OCB dimensions showed that they are positively and significantly related while still maintaining conceptual distinctiveness. For instance, Courtesy and Altruism exhibited the strongest association ( $r = .790$ ), indicating their shared interpersonal focus, yet they remained empirically distinct constructs. When combined, the results demonstrate that the created instrument is a reliable psychometric tool for evaluating OCB in postsecondary educational settings. It exhibits strong construct validity, high reliability, and a stable factor structure that aligns with accepted theoretical frameworks (Organ, 1988). By offering a trustworthy way to evaluate instructors' organizational citizenship practices, the tool not only advances scholarly research but also has applications for colleges. To sum up, this validated tool is a valid and trustworthy indicator of OCB.

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