

The Effect of Organizational Justice on Organizational Citizenship Behavior Through the Mediating Role of Organizational Commitment in the Public Universities in Amhara Region

Shimelis Mesfin*

Assistant Professor of Educational Policy and Leadership in the University of Gondar, Ethiopia

*Corresponding Author

Shimelis Mesfin, Assistant Professor of Educational Policy and Leadership in the University of Gondar, Ethiopia.

Submitted: 2025, Feb 03; Accepted: 2025, Feb 18; Published: 2025, Apr 14

Citation: Mesfin, S. (2025). The Effect of Organizational Justice on Organizational Citizenship Behavior Through the Mediating Role of Organizational Commitment in the Public Universities in Amhara Region. *Curr Trends Business Mgmt*, 3(1), 01-12.

Abstract

The purpose of this study was to examine the effect of organizational justice (OJ) on organizational citizenship behavior (OCB) through the mediating role of organizational commitment (OC) in the public universities in Amhara region. Explanatory mixed research design was employed. The size of the population was 2170. Of these, 620 instructors were selected as samples using a proportional stratified random sampling technique. Five interviewees took part in the qualitative part of the study. The collected data were analyzed using both quantitative and qualitative techniques. The result of one sample t-test indicated that the mean scores of OC (52.981) and OCB (71.363) were higher than the respective test values of these variables with ($t = 15.398$) and ($t = 5.639$) at $p < .05$, $df = 619$. On the contrary, the mean score of OJ (43.934) was lower than the test value with ($t = -11.987$, $df = 619$) at $p < .05$. The result of the structural equation modeling (SEM) indicated that there were positive and statistically significant relationships among OJ, OC, and OCB. Concerning the causal relationships, the value of R^2 indicated that OJ significantly predicted 44.3 % of the variance in OC with a standardized regression coefficient of ($\beta = .667$) at $p < .05$, while 29.2 % of the variance in OCB was significantly predicted by the joint effects of OJ and OC with standardized regression coefficients of ($\beta = .341$) and ($\beta = .164$) respectively at $p < .05$. Statistically significant differences were found among instructors in their perception of OJ ($F = 132.833$, $p = .000$), OC ($F = 3.163$, $p = .024$) and OCB ($F = 19.071$, $p = .000$) across the four generations of universities. Therefore, it is concluded that OJ had a significant effect on OCB through the mediation of OC. Thus, it is suggested to improve the current status of OJ, OC, and OCB in the research sites. of a proprietary synthetic tissue adhesive to occlude the fallopian tubes, fully degrading and producing nonfunctional scar tissue. It has the potential to offer safe, effective, accessible, non-surgical permanent contraception as an option to surgical sterilization with fewer risks, contraindications, and a substantially lower cost.

Keywords: Organizational Commitment, Organizational Citizenship Behavior, Organizational Justice, Public Universities

1. Introduction

Though different factors have their own contributions to the function of organizations, organizational justice (OJ), organizational commitment (OC) and organizational citizenship behavior (OCB) play important roles in enhancing the success of organizations. Specifically, OJ is concerned with employees' perception of fair treatment in the organization which is conceptualized in terms of distributive, procedural, and interactional justice [1]. Whereas OC is viewed as the desire of employees to stay in the organizations defined in terms of affective, continuance, and normative commitment which are related to each other [2]. Concerning OCB, it is discretionary behavior neither in the job description nor

recognized in the formal reward system understood in altruism, conscientiousness, sportsmanship, courtesy, and civic virtue [3]. The findings of the previous studies indicated that significant relationships are found among OJ, OC, and OCB. For instance, Karanja found that OJ had a significant effect on employees' levels of commitment [4].

Furthermore, studies conducted by Khan and Rashid and Crow, Lee, and Joo indicated that employees' feeling of justice significantly influenced their OC [5,6]. In the same way, Karriker and Williams found that employees' engagement in citizenship activities benefits the organizations to be effective [7]. Other

researchers found that employees' level of engagement in citizenship activities was significantly determined by OJ [8,9]. This means that employees who perceive fairness in the treatment of their leaders are more likely to engage in citizenship behaviors. Moreover, the findings of several studies indicated that OC had a significant effect on the OCB of employees [10-13]. This indicates that there are causal relationships among OJ, OC, and OCB. Based

on the discussions made so far about OJ, OC, and OCB as well as the relationships among these variables, the researcher synthesized a new conceptual framework for this study as indicated in Figure 1. This framework considers OJ as an independent variable that affects OCB. It also explains OC as the mediating variable in the relationship between OJ and OCB. OCB is considered a dependent variable that is affected by OJ directly and indirectly.

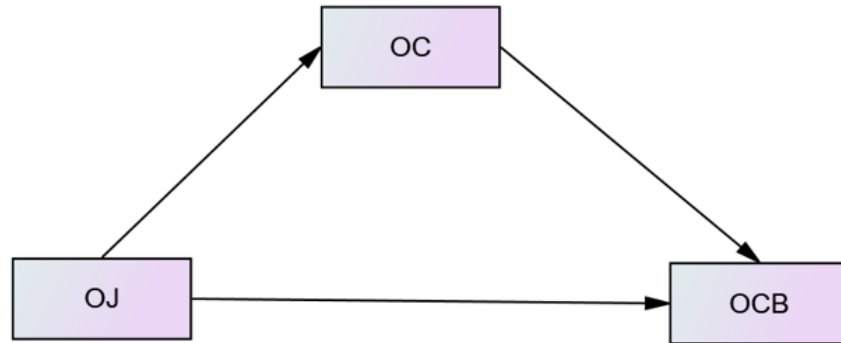


Figure 1. The conceptual framework of the study

OJ, OC, and OCB are important variables linked with the effectiveness of any organization including higher education institutions. The findings of many studies indicated that employees show distrust towards the goals of the organization and exhibit workplace aggression due to lack of fair treatment in the organization [14,15]. These situations lead to increased turnover intention and interpersonal deviance, exhibit counter-productive work behavior and low commitment, and eventually, they may pursue to leave the organization [1,16,17]. These indicate that employees who are deprived of justice in the organization will be susceptible to stress and burn-out leading to low productivity. Concerning commitment, the findings of many studies indicated that a low level of commitment leads to turnover and attrition, absenteeism, counter-productive behavior, and decline in altruism and compliance [18-21]. A survey conducted by Bosman, Buttendach, and Laba showed that a high level of employee turnover was associated with poor function of the organization and increased costs involved in selecting and training replacements [22]. These can cause a loss of work progress, productivity, organizational status, and poor relationships with customers [23]. High turnover rates can increase the cost of recruitment, training, and retention of staff, as well as negatively affect the success of the organization in attaining strategic objectives, sustaining competitive advantage, and keeping the morale, productivity, and quality of work in the organization [23,24]. Similarly, the shortage of professionally capable, motivated, and committed leaders is another challenge in Ethiopian universities [25].

OCB is another important issue that maximizes the performance of the organizations by encouraging employees to exert extra effort. Though OCB contributes to the development of employees and organizational effectiveness, it is not officially recognized by many organizations [3]. Due to this reason, research has not been conducted on OCB in Ethiopian higher education institutions in general and in public universities in particular.

Bez also believed that shortage of studies related to OCB undermines the contribution of employees in the organizations [26]. Discrimination, organizational injustice, and habituation are considered as the major factors that discourage employees from engaging in OCB [27]. This will not only lead to a decrease in the participation of employees in OCB but also enable them to engage in counterproductive behavior such as theft and absenteeism [28]. This suggests that organizations will be effective if employees are willing to be involved in OCB. Although several studies have been done on OJ, OC, and OCB in various organizations, sufficient studies have not been conducted on the effect of OJ on OCB in the context of higher education institutions. Despite limited studies have been done on the direct causal relationship between OJ and OCB, a study has not been conducted on the indirect effect of OJ on OCB through the mediation of OC in the context of Ethiopian public universities in general and in the public universities of Amhara region in particular [9,29-31]. As a result, this study examined the effect of OJ on OCB through the mediating role of OC in the public universities in Amhara region.

1.1 Research Questions

- What is the perception of instructors towards OJ, OC, and OCB in the public universities in Amhara region?
- What are the relationships among OJ, OC, and OCB in the public universities in Amhara region?
- What is the effect of OJ on OC and OCB in the public universities in Amhara region?
- What is the effect of OC on OCB in the public universities in Amhara region?
- What is the indirect effect of OJ on OCB of mediated by OC in the public universities in Amhara region?
- Are there significant differences among instructors in their perception of OJ, OC, and OCB in the four generations of public universities in Amhara region?

2. Research Methods

2.1 Research Design

Based on the nature of the study, explanatory sequential mixed design (QUAN → qual) was employed to understand the quantitative results in depth using the qualitative data. Explanatory sequential mixed design has a strong quantitative orientation in

which the researcher first gathers the quantitative data analyzes the results, and then plans the qualitative phase of the study using the quantitative results [32]. This design will capitalize on the strengths and minimize the limitations of quantitative and qualitative research approaches [33,34]. A simplified illustration of explanatory sequential mixed design is shown in Figure 2.

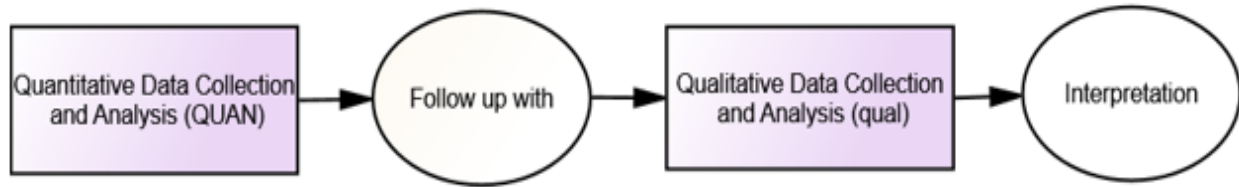


Figure 2: Explanatory Sequential Mixed Design, Adapted from Creswell (2014)

2.2 Population, Sample, and Sampling Techniques

There are 10 public universities in Amhara region. These universities are categorized into four generations based on the year of establishment. Initially, six universities were selected out of 10 from the specified strata. That is, the University of Gondar from the 1st generation, Wollo and Debre Markos Universities from the 2nd generation, Debre Tabor University from the 3rd generation, and Injibara and Debarq universities from the 4th generation were selected using a stratified random sampling technique. These stratifications also allowed us to ensure the representation of universities from each generation and make comparisons among respondents in their perception of servant leadership, OC, and OCB. Then, 21 colleges were selected from the six universities to determine the size of the population and subpopulations of the study. Specifically, five colleges from the University of Gondar, four colleges from Wollo University, four colleges from Debre Markos University, four colleges from Debre Tabor University, two colleges from Injibara University, and two colleges from Debark University were selected using a simple random sampling technique mainly lottery method. In this regard, a total of 2170 instructors in the selected universities were taken as the population of the study. Of these; 731 from the 1st generation, 710 from the 2nd generation, 427 from the 3rd generation, and 302 from the 4th generation were considered as the subpopulations of the study.

Different sampling techniques are used to determine the sample size of various studies. Item-respondent proportion requirement is highly recommended by different authorities to determine the size of the sample to undertake factor analysis. Though there is no single criterion that determines the necessary sample size, Comrey and Lee suggested that a sample size of 500 and above would be good for carrying out factor analysis [35]. Based on the

recommendations of Everitt, Ho, and Kline, 10 respondents per each item were used as a method to determine the sample size of this study [36-38]. Accordingly, the sample size of this study was 620 since the number of items under the dimensions of the latent variables in the questionnaire was 62. After determining the total sample size of the study, the sample size of each stratum was determined based on the size of their population using a proportionate stratified sampling method developed by Pandey and Verma [39]. This helps to select representative samples from each stratum with the assumption that the number of instructors in the selected strata was significantly varied. Hence, the researcher determined the sample size of each stratum by dividing the population size of the kth strata by the total population size and multiplying by the total sample size using Pandey and Verma's (2008) formula as given below. i.e.

$$n_k = \left(\frac{N_k}{N} \right) * n$$

Where;

n_k = Sample size of kth strata

N_k = Population size of the kth strata

N = Total population size

n = Total sample size

Of the total sample of 620 instructors; 209 from the 1st generation, 203 from the 2nd generation, 122 from the 3rd generation, and 86 from the 4th generation were taken into the sample using the above-given formula. This helped to avoid the misrepresentation of some members of the population in the study. These samples were selected using a simple random sampling technique. The summary of the population and sample of the study are shown in Table 1 below.

Strata	Name of universities	Population size of each university (N_k)	Sample size of each university (n_k)
1 st generation	University of Gondar	731	209
	Wollo University	280	80
2 nd generation	Debre Markos University	430	123
3 rd generation	Debre Tabor University	427	122
	Injibara University	145	41

4 th generation	Debank University	157	45
	Total	N= 2170	n= 620

Table 1: Summary of Population and Sample of the Study

With regard to the qualitative phase of the study, five department heads were included in the sample using purposive sampling techniques to collect the qualitative data through semi-structured interviews to further explain the quantitative results.

2.3 Data Gathering Instruments

The researcher used a standardized questionnaire to collect the quantitative data. The questionnaire has four parts containing close-ended items. The first part dealt with respondents' characteristics related to sex, educational qualification, work experience, and universities in which they have been working. The second part of the questionnaire contains 19 items developed by Moorman and Niehoff and Moorman to assess respondents' perceived OJ in terms of distributive, procedural, and interactional justice [40,41]. The third part of the questionnaire measured respondents' perception of OC using 18 items organized into three dimensions – affective commitment, continual commitment, and normative commitment developed by Meyer [42]. The fourth part of the questionnaire contains 25 items developed by Lee and Allen to measure respondents' OCB in universities [43]. This scale consists of five dimensions such as altruism, conscientiousness, sportsmanship, courtesy, and civic virtue to fully understand the status of OCB in the universities. Finally, respondents were asked to rate items using five points of Likert-type items ranging from 1 (*not at all*) to 5 (*very great extent*) to measure, OJ, OC, and OCB in the universities. With regard to qualitative data, a semi-structured interview was conducted to assess the status of OJ, OC, and OCB in the study area.

2.4 Pilot Test

A pilot test was conducted on 90 selected instructors of Bahir Dar University to assess the reliability of the questionnaire. The distribution of the sample for the pilot test followed the same procedures as in the main sample of the study. Cronbach Alpha was used to test the reliability of items. The reliability coefficients of the instrument with Cronbach Alpha (α) = (.92, .87 & .94), (.83, .82 & .88) and (.83, .85, .90, .86 & .88) for items about the dimensions of OJ, OC, and OCB respectively. This shows that items in the respective dimensions of latent variables with reliability coefficients $>.80$ were found internally consistent in measuring OJ, OC, and OCB (George & Mallery, 2010).

2.5 Data Collection Procedures

Firstly, the researcher got a permission letter from Bahir Dar University to collect the data from the research sites. Based on the given permission, the list of the target respondents was accessed, and the required sample size. Respondents were provided information about the purpose of the study before they took place in the study. Participants were also informed about the absence of potential risks and benefits due to participation in the study. Then,

the questionnaire was distributed to the respondents and they were given three days to complete the questionnaire.

After the questionnaire was returned to the researcher and analyzed the data, a face-to-face interview was conducted with each respondent inside the compounds of the universities.

2.6 Data Analysis Techniques

Both quantitative and qualitative analysis techniques were used to analyze the data. Specifically, a one-sample t-test was used to measure OJ, OC, and OCB (Research question #1). Structural equation modeling (SEM) was used to assess the relationships among OJ, OC, and OCB (Research question #2). SEM was employed to analyze the effect of OJ on OC and OCB of instructors (Research question #3). The effect of OC on the OCB of instructors was analyzed using SEM (Research question #4). SEM was also used to analyze the indirect effect of OJ on the OCB of instructors mediated by OC (Research question #5). One-way ANOVA was employed to assess whether there are significant differences among instructors in their perception of OJ, OC, and OCB in the four generations of public universities in Amhara region (Research question #6). Moreover, the data collected through semi-structured interviews were analyzed qualitatively with the intent to further understand the quantitative results in depth.

3. Results and Discussion

This section presents the results of the study according to the themes of the research questions. It began with testing the construct validity of the respective dimensions of latent variables and measurement model fit through conducting exploratory and confirmatory factor analyses.

3.1 Factor Analyses

Although there is no clear criterion to decide what is large or small, items with factor loadings $\pm.33$ and above are considered to satisfy the minimum level of threshold based on the recommendation of Ho [37]. The result of the exploratory factor analysis indicated that 55 items in the respective dimensions of OJ, OC, and OCB had high factor loadings above the cutoff point of $\pm.33$ were retained. Specifically, the factor loading values of these items range from .628 to .914 which explained more than 50 % of the variance in the constructs was maintained. However, seven items with low factor loadings were rejected from the analysis for they suppressed the reliability of the results. The result of the principal component analysis also showed that the factor loadings of OJ, OC, and OCB dimensions with eigenvalues ranging from 1.464 to 3.896 are higher than the minimum threshold of 1. Based on the results of construct validity, the researcher developed the measurement model using the dimensions of OJ, OC, and OCB as indicated in Figure 3.

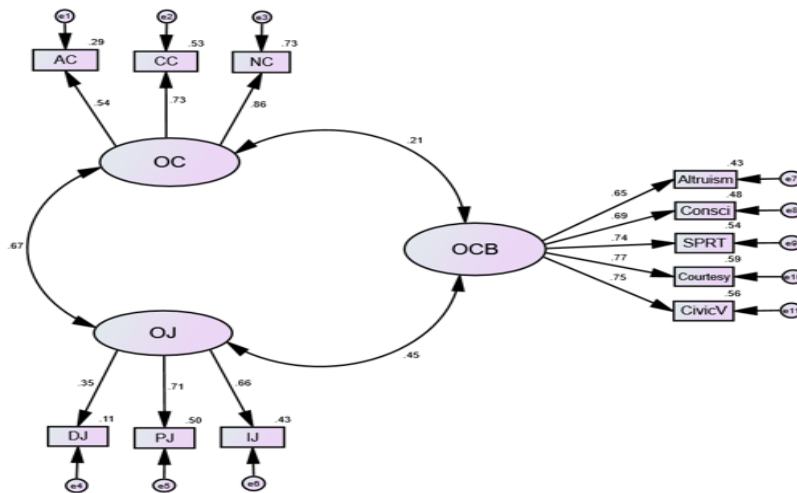


Figure 3. The proposed measurement model

Though there is little agreement among scholars on the type of fit indices and their thresholds, the researcher used relative chi-square (CMIN/DF), goodness fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), incremental fit index

(IFI), Tucker-Lewis index (TLI), comparative fit index (CFI) and root mean square error of approximation (RMSEA) to assess the degree to which the measurement model fits the observed covariance matrix using AMOS as indicated in Table 2.

Criteria	Obtained values	Threshold
Relative chi-square (CMIN/DF)	3.036	<5
Goodness of fit index (GFI)	.964	>.90
Adjusted goodness of fit index (AGFI)	.942	>.90
Normed fit index (NFI)	.940	>.90
Incremental fit index (IFI)	.959	>.90
Tucker-Lewis index (TLI)	.945	>.90
Comparative fit index (CFI)	.959	>.90
Root mean square error of approximation (RMSEA)	.047	<.05

Table 2: AMOS outputs on the fitness indices against the criteria of the measurement model

As it has been indicated in Table 2, the measurement model satisfied all the fit indices. That is, the results indicated that the measurement model fits the observed variance–covariance matrix by the chi-square test (CMIN/DF), χ^2 (N = 620, df = 41) = 124.464, $p < .05$. In addition, the fit indices of GFI (.964), AGFI (.942), NFI (.940), IFI (.959), TLI (.945) and CFI (.959) were higher than the threshold of .90 and RMSEA (.047) was lower than the cutoff of

point .05 with $p = .000$.

The maximum likelihood estimates of the unstandardized repression and standardized regression weights also confirmed that all the path coefficients in the measurement model are significant at $p < .05$ as shown in Table 3.

Parameters/dimensions			Unstandardized				Standardized
			Estimate	S.E.	C.R.	P	
Distributive justice	<---	OJ	.472	.072	6.529	***	.329
Procedural justice	<---	OJ	.859	.082	10.535	***	.709
Interactional justice	<---	OJ	1.000				.659
Affective commitment	<---	OC	.582	.048	12.044	***	.538
Continuance commitment	<---	OC	.823	.054	15.175	***	.731
Normative commitment	<---	OC	1.0000				.857
Altruism	<---	OCB	1.000				.653
Conscientiousness	<---	OCB	1.070	.075	14.196	***	.690
Sportsmanship	<---	OCB	1.088	.073	14.922	***	.737

Courtesy	<---	OCB	1.172	.076	15.338	***	.766
Civic virtue	<---	OCB	1.147	.076	15.095	***	.749

Table 3: Unstandardized and standardized regression weights of the measurement model

As shown in Table 3, the regression weights of all the dimensions of OJ, OC, and OCB were significant with the critical ratio test greater than ± 1.96 at $p < .05$. From this, it is possible to conclude that the critical ratio tests of the 11 dimensions were extremely far from the threshold of ± 1.96 indicates a significant path at $p < .05$. Likewise, the standardized regression weights of all dimensions in the measurement model were significantly represented by their respective latent variables. Specifically, the standardized regression weights of the observed variables in the measurement model range from .329 (distributive justice) to .857 (normative commitment). In other words, the observed variables explained

the respective latent constructs ranging from 10.8 % (distributive justice) to 73.4 % (normative commitment). This indicated that the observed variables were significantly represented by their respective latent variables at $p < .05$. Therefore, the measurement model analysis confirmed that all dimensions were internally consistent and structurally valid to measure OJ, OC, and OCB in the context of this study.

3.2 Status of Organizational Justice, Commitment, and Organizational Citizenship Behavior

Dimensions	Mean	Std.	Test value	Mean difference	t-value	Sig.(2-tailed)
Organizational justice						
Distributive justice	13.64	2.934	12	1.635	13.878	.000
Procedural justice	11.08	4.051	15	-3.924	-24.121	.000
Interactional justice	19.22	4.133	21	-1.777	-10.709	.000
Total	43.934	8.446	48	-4.066	-11.987	.000
Organizational commitment						
Affective commitment	22.80	5.281	18	4.805	22.653	.000
Continuance commitment	16.04	4.778	18	-1.956	-10.196	.000
Normative commitment	14.13	3.116	12	2.132	17.037	.000
Total	52.981	8.054	48	4.981	15.398	.000
Organizational citizenship behavior						
Altruism	14.16	2.756	12	2.160	19.509	.000
Conscientiousness	13.92	4.943	15	-1.082	-5.451	.000
Sportsmanship	14.07	4.509	15	-.929	-5.131	.000
Courtesy	14.50	4.800	15	-.505	-2.619	.000
Civic virtue	14.72	2.207	12	2.719	30.680	.000
Total	71.363	10.433	69	2.363	5.639	.000
N=620, df = 619, *Sig. <.05						

Table 4: A One-Sample t-test for the Dimensions of OJ, OC, and OCB

As indicated in Table 4, the result of one sample t-test revealed that the mean score of distributive justice (13.64) was greater than the test value at ($t = 13.878$) at $p < .05$, $df = 619$. This means that instructors fairly perceived the state of distributive justice in the workplace. On the other hand, the mean scores of procedural justice (11.08) and interactional justice (19.22) were less than the respective test values at ($t = -24.121$) and ($t = -10.709$) respectively at $p < .05$, $df = 619$. Hence, the mean score of OJ (43.934) was lower than the t value (48) with ($t = -11.987$, $df = 619$) at $p < .05$, indicating that OJ was observed to a small extent in the respective universities. This result is quite similar to the qualitative result obtained through the interview. The finding of this study is supported by other researchers. For example, a more recent work of Wajdee, Gurvinder, and Shehadehmoftah (2018) revealed that

employees had good perceptions of OJ in public universities, which is congruent with this finding. However, the findings of Cohen and Spector (2001), Spector and Fox (2002), and Vardi and Wiener (1996) indicated that employees are exposed to stress, turnover, dissatisfaction, low commitment, distrust, and violence leading to low productivity due to lack of OJ in the organizations. With regard to OC, the mean scores of affective commitment (22.80) and normative commitment (14.13) were higher than the respective test values at ($t = 22.653$) and ($t = 17.037$) at $p < .05$, $df = 619$. This implies that instructors were moderately committed to carrying out their jobs due to their emotional attachment to the universities and sense of responsibility to serve the universities. Conversely, the mean score of continuance commitment (16.04) was lower than the test value at ($t = -10.196$). Thus, the mean score

of OC (52.981) was higher than the t value (48) with ($t = 15.398$, $df = 619$) at $p < .05$, indicating that instructors in the research sites were committed to some extent to performing their job. A similar result was also found in the interview.

This result is supported by Jafri (2010) that academic staff had a moderate level of commitment to maintaining membership in the organization. Consistent with this result, Alemu (2014) at Adama Science and Technology University revealed that instructors had a moderate level of commitment. Research also conducted by Salami and Omole (2005) and Temesgen (2011) revealed that employees in the organizations were fairly committed to carrying out their jobs. However, the result of this is contradicted by the finding of Madsen, Miller, and John (2005) that employees had a higher level of OC and showed a willingness to invest substantial effort on behalf of the organizations and are loyal to it.

Moreover, the results of one sample t-test showed that the mean scores of altruism (14.16) and civic virtue (14.72) were higher than the respect test values at ($t = 19.509$) and ($t = 30.680$) respectively. This implies that instructors were to some extent volunteers to support their coworkers and universities by offering important

suggestions. On the contrary, the mean scores of conscientiousness (13.92), sportsmanship (14.07), and courtesy (14.50) were less than the respective test values at ($t = -5.451$), ($t = -5.131$), and ($t = -2.619$) respectively at $p < .05$, $df = 619$. Hence, the mean score of OCB (71.363) was higher than the t value (69) with ($t = 5.639$, $df = 619$) at $p < .05$, indicating that instructors were engaged in citizenship activities to some extent to support the function of their universities. This result is supported by the qualitative result that was found through the interview. This result is quite similar to the findings of (Akyuz, 2012; Oguz, 2011; and Polat & Celep, 2008) on the presence of moderate levels of OCB in workplaces. The finding of this study also supported by Turnipseed and Murkison (2000) that OCB contributes to the organization by creating positive workplace environments. Extra-role behaviors are also essential for an organization, as they are likely to promote more effective communication, which allows best practices to be shared among employees (Ren-Tao & Heung-Gil, 2009). Employees who engage in OCB can enhance organizational effectiveness and efficiency by exerting extra effort beyond their duties.

3.3 Relationships among Organizational Justice, Organizational Commitment, and Organizational Citizenship Behavior

Latent variables			Unstandardized				Standardized
			Estimate	S.E.	C.R.	P	Estimate
OJ	<-->	OC	.479	.052	9.211	***	.671
OJ	<-->	OCB	.678	.089	7.617	***	.452
OCB	<-->	OC	.332	.096	3.458	***	.212

Table 5: Correlation Coefficients of OJ, OC, and OCB

As indicated in Table 5, positive and statistically significant relationships are observed among OJ, OC, and OCB with standardized correlation coefficients ranging from .212 to .671. Specifically, OJ had positive correlation coefficients with OC ($r = .671$) and OCB ($r = .452$) by the critical ratio greater than ± 1.96 at $p < .05$. This finding is congruent with the result of Ghafori and Golparvar (2009) that OJ had positive and significant correlation with OC because staff perceived their leader to be fair, respectful and unbiased in their dealings. Kiray (2011) and Shekari (2011) also found a significant relationship between OJ and OC. Similarly, Damirchi, Hazrati, and Poushaneh (2013) reported that a significant relationship was found between OJ and OCB. This result is also supported by Nastiezaie and Jenaabadi (2016) also indicated that OJ was significantly related to OCB. There is also a positive and significant relationship between OC and OCB with a significant correlation coefficient ($r = .212$) at $p < .05$. Studies

conducted by Gurbuz (2006) and Wasti (2003) showed that OC was significantly associated with OCB. Similarly, the findings of other researchers proved the presence of a significant relationship between OC and OCB (Hannam & Jimmieson, 2002; Ibrahim & Aslinda, 2013; Williams, Rondeau, & Francescutti, 2007). This shows that instructors were committed to supporting the function of their universities without expecting rewards in return. This means that the three latent variables in the measurement model are significantly related to each other.

3.4 Path analysis/causal relations

Based on the measurement model, the researcher developed a structural model to examine how much of the dependent variables in the structural model are predicted by independent variables as shown in Figure 4.

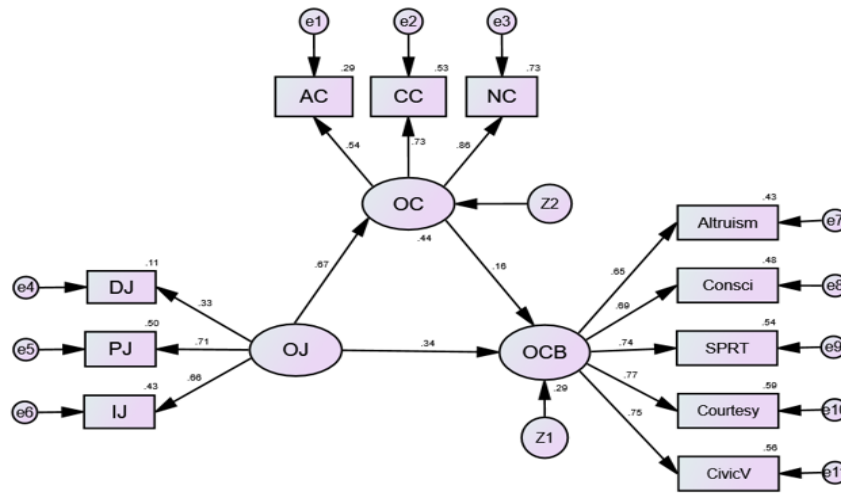


Figure 4. Structural model of three variables

Latent variables			Unstandardized				Standardized
			Estimate	S.E.	C.R.	P	Estimate
OC	<---	OJ	.841	.144	5.856	***	.667
OCB	<---	OJ	.489	.162	3.018	***	.341
OCB	<---	OC	.196	.162	1.210	.226	.164

Table 6: Unstandardized and Standardized Regression Weights of the Latent Variables in the Structural Model

The results in Table 6 indicated that except for the causal relationship between OC and OCB, the unstandardized regression weights of the latent variables were found significant by the critical ratio tests greater than ± 1.96 at $p < .05$. The standardized regression coefficients of the latent variables in the structural model ranging from .164 to .667. After testing the structural model fit, the direct and indirect effects of the independent variables on the dependent variables in the structural model were analyzed to examine how much of the variance in the dependent variables, both latent and observed, was predicted by the independent variables that are presented in the following subsections.

3.4.1 Direct Effects

As shown in Figure 4 and Table 6, the paths pointing from OJ to OC ($\beta = .667$, $p < .05$) and OCB ($\beta = .341$, $p < .05$) have positive standardized regression coefficients indicating that OJ significantly predicted both OC and OCB. The standardized regression coefficients also indicated that OJ had a more direct effect on OC than OCB. Thus, the value of R^2 indicated that OJ significantly predicted 44.3 % of the variance in OC. Similar to this study, Imamoglu reported that OJ had a significant effect on OC [44]. Other researchers also supported the significant influence of OJ on employees' level of commitment in the workplace [45,46]. The result of this study is also consistent with the works of other researchers on the significant effect of OJ on OCB [47,48].

Moreover, Hassan also reported that OJ had a significant effect on the organizations' OCB [49]. This implies that employees are inclined to show OCB when they are fairly treated in the workplace. The path that links OC and OCB with a standardized coefficient ($\beta = .164$, $p > .05$) also indicates that OCB was not significantly predicted by OC. The value of R^2 also revealed that 29.2 % of the variance in OCB was predicted by the joint effects of OJ and OC, whereas the rest 71 % of the variation in OCB was attributed to the residual that couldn't be explained by the model. In contrast to this result, Alotaibi and Carmeli found that OC had a significant effect on OCB which is similar to the result of the study [10,11]. This result is also supported by the findings of other previous studies [12,13,50,51].

3.4.2 Indirect effect

Table 7 revealed that OJ had an indirect and significant effect on OCB through the mediation of OC with a standardized regression coefficient ($\beta = .107$, $p < .05$). This shows that OJ had a significant direct and indirect effect on OCB. This finding is congruent with the finding of Ali (2016) that employees' perception of justice indirectly and significantly influenced employees to engage in citizenship activities to support their coworkers and organizations through the mediating role of OC. Similarly, Jehanzeb and Mohanty found that OC was significantly mediating the effect of OJ perception on the OCB of employees [52].

Effect	Variables	OJ	OC	OCB
Direct effect	OC	.667	-	-
	OCB	.341	.164	-
Indirect effect	OCB	.107	-	-

R2			.443	.292
----	--	--	------	------

Table 7: Summary of the Direct and Indirect Effect of OJ and OC on the OCB

3.5 Generations of universities as the variances of OJ, OC, and OCB

Variables	Generations of universities	Sum of Squares	df	Mean Square	F	Sig.
OJ	Between Groups	84.092	3	28.031	132.833	.000
	Within Groups	129.990	616	.211		
	Total	214.082	619			
OC	Between Groups	2.334	3	.778	3.163	.024
	Within Groups					
	Total					
OCB	Between Groups	10.493	3	3.498	19.071	.000
	Within Groups	112.975	616	.183		
	Total	123.468	619			

*Significance level at .05 level

Table 8: One-way ANOVA in OJ, OC, and OCB Scores of Instructors Based on the four Generations Of Universities

As shown in Table 8, the result of one-way ANOVA indicated that there were statistically significant differences among instructors in their perception of OJ at $F(3,616) = 132.833$, and OC at $F(3,616) = 3.163$, and OCB at $F(3,616) = 19.071$, $p = .000$ based on the four generations of universities in Amhara region. This shows that instructors in the four generations of universities of Amhara region had different views regarding the status of OJ, OC, and OCB.

4. Conclusions and Recommendations

4.1 Conclusions

Based on the results obtained from the empirical study, the following conclusions are drawn.

- The results of one sample t-test revealed that OC and OCB were observed to some extent while OJ was found to a small extent in the universities as perceived by instructors.
- There were positive and statistically significant relationships among OJ, OC, and OCB.
- OJ had a significant effect on the OC and OCB of instructors with standardized regression coefficients of ($\beta = .667$) and ($\beta = .341$) respectively.
- OC had a statistically significant effect on the OCB of instructors with a standardized regression coefficient of ($\beta = .164$) at $p < .05$.
- The result of R^2 indicated that OJ predicted 44.3 % of the variance in OC, while 29.2 % of the variance in OCB was predicted by the joint effects of OJ and OC.
- OJ had also an indirect and significant effect on OCB mediated through OC with a standardized regression coefficient of ($\beta = .107$) at $p < .05$. This shows that OJ had significant direct and indirect effects on OCB.
- Significant differences were found among instructors in their perception of OJ, OC, and OCB based on the four generations of public universities in Amhara region [53-77].

4.2 Recommendations

- The universities need to improve the status of OJ by focusing

on procedural justice and interactional justice by validating the fairness of methods used to make the decision.

- It needs to give high attention to the commitment of academic staff to achieve the goals and objectives of the universities effectively.
- Motivate instructors to engage in OCB by creating awareness about the benefit of OCB in supporting the function of the universities. Especially, academic leaders need to encourage instructors to be conscientious, sportsmanship, and courteous.
- Universities need to institutionalize OCB for the successful attainment of their mission. This means that every instructor should have an obligation to engage in OCB as part of his/her duty.

References

- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational behavior and human decision processes*, 86(2), 278-321.
- Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of occupational psychology*, 63(1), 1-18.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington books/DC Heath and com.
- Karanja, G. W. (2017). *Effect of organizational justice on organizational commitment in public secondary schools and commercial banks in Kenya* (Doctoral dissertation, COHRED, JKUAT).
- Khan, S. K., & Rashid, M. Z. A. (2012). The Mediating Effect of Organizational Commitment in the Organizational Culture, Leadership and Organizational Justice Relationship with Organizational Citizenship Behavior: A Study of Academicians in Private Higher Learning Institutions in Malaysia. *International Journal of Business and Social Science*, 3(8).

6. Crow, M. S., Lee, C. B., & Joo, J. J. (2012). Organizational justice and organizational commitment among South Korean police officers: An investigation of job satisfaction as a mediator. *Policing: an international journal of police strategies & management*, 35(2), 402-423.
7. Karriker, J. H., & Williams, M. L. (2009). Organizational justice and organizational citizenship behavior: A mediated multifoci model. *Journal of management*, 35(1), 112-135.
8. Lilly, J. (2015). The impact of justice type on organizational citizenship behavior: Do outcome favorability and leader behavior matter? *Current Psychology*, 34, 26-49.
9. Shin, J., & Sohn, Y. W. (2015). Effects of employees' social comparison behaviors on distributive justice perception and job satisfaction. *Social Behavior and Personality: an international journal*, 43(7), 1071-1083.
10. Alotaibi, A. G. (2001). Antecedents of organizational citizenship behavior: A study of public personnel in Kuwait. *Public personnel management*, 30(3), 363-376.
11. Carmeli, A. (2004). The link between organizational elements, perceived external prestige and performance. *Corporate Reputation Review*, 6, 314-331.
12. Harwika, W. (2013). The influence of servant leadership on organization culture, organizational commitment, organizational citizenship behavior and employees' performance (Study of outstanding cooperatives in East Java Province, Indonesia). *Journal of Economics and Behavioral Studies*, 5(12), 876-885.
13. Liu, Y. (2010). When change leadership impacts commitment to change and when it doesn't: A multi-level multi-dimensional investigation. Georgia Institute of Technology.
14. Dean Jr, J. W., Brandes, P., & Dharwadkar, R. (1998). Organizational cynicism. *Academy of Management review*, 23(2), 341-352.
15. Kennedy, D. B., Homant, R. J., & Homant, M. R. (2004). Perception of injustice as a predictor of support for workplace aggression. *Journal of Business and Psychology*, 18, 323-336.
16. Spector, P. E., & Fox, S. (2002). An emotion-centered model of voluntary work behavior: Some parallels between counterproductive work behavior and organizational citizenship behavior. *Human resource management review*, 12(2), 269-292.
17. Aslam, U., Ilyas, M., Imran, M. K., & Rahman, U. U. (2016). Detrimental effects of cynicism on organizational change: an interactive model of organizational cynicism (a study of employees in public sector organizations). *Journal of Organizational Change Management*, 29(4), 580-598.
18. Joiner, T. A., & Bakalis, S. (2006). The antecedents of organizational commitment: the case of Australian casual academics. *International journal of educational management*, 20(6), 439-452.
19. Farrell, D., & Stamm, C. L. (1988). Meta-analysis of the correlates of employee absence. *Human relations*, 41(3), 211-227.
20. Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of applied psychology*, 90(6), 1241.
21. Schappe, S. P. (1998). The influence of job satisfaction, organizational commitment, and fairness perceptions on organizational citizenship behavior. *The journal of Psychology*, 132(3), 277-290.
22. Laba, K., Bosman, J., & Buitendach, J. H. (2005). Job insecurity, burnout and organisational commitment among employees of a financial institution in Gauteng. *SA Journal of Industrial Psychology*, 31(4), 32-40.
23. Alzubi, Y. Z. W. (2018). Turnover intentions in Jordanian Universities: The role of leadership behaviour, organizational commitment and organizational culture. *International Journal of Advanced and Applied Sciences*, 5(1), 177-192.
24. Al-Hussami, M. (2008). Relationship to organizational commitment, perceived organizational support, transactional leadership, transformational leadership, and level of education. *European Journal of Scientific Research*, 22(2), 286-295.
25. Kahsay, M. N. (2012). Quality and quality assurance in Ethiopian higher education: Critical issues and practical implications.
26. Bez, O. (2010). Organizational Citizenship Behavior and its Relationship with Major Attitudinal Factors: A Comparative Study between Two Police Regions of Turkish National Police.
27. Zhang, D. (2011). Organizational citizenship behavior. *White paper*, 3.
28. Marcus, B., & Schuler, H. (2004). Antecedents of counterproductive behavior at work: a general perspective. *Journal of applied psychology*, 89(4), 647.
29. Chahal, H., & Mehta, S. (2010). Antecedents and consequences of organisational citizenship behaviour (OCB): A conceptual framework in reference to health care sector. *Journal of Services Research*, 10(2), 25.
30. Iqbal, H. K., Aziz, U., & Tasawar, A. (2012). Impact of organizational justice on organizational citizenship behavior: An empirical evidence from Pakistan. *World Applied Sciences Journal*, 19(9), 1348-1354.
31. Spector, P. E., & Che, X. X. (2014). Re-examining citizenship: How the control of measurement artifacts affects observed relationships of organizational citizenship behavior and organizational variables. *Human Performance*, 27(2), 165-182.
32. Creswell, J. W. (2021). *A concise introduction to mixed methods research*. SAGE publications.
33. Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
34. Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational researcher*, 33(7), 14-26.
35. Comrey, A. L., & Lee, H. B. (2013). *A first course in factor analysis*. Psychology press.
36. Everitt, B. S. (1975). Multivariate analysis: The need for data, and other problems. *The British Journal of Psychiatry*, 126(3), 237-240.
37. Ho, R. (2006). Handbook of univariate and multivariate data analysis and interpretation with SPSS.

38. Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
39. Pandey, R., & Verma, M. R. (2008). Samples allocation in different strata for impact evaluation of developmental programme. *Rev. Mat. Estat*, 26(4), 103-112.
40. Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship?. *Journal of applied psychology*, 76(6), 845.
41. Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management journal*, 36(3), 527-556.
42. Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of applied psychology*, 78(4), 538.
43. Lee, K., & Allen, N. J. (2002). Organizational citizenship behavior and workplace deviance: the role of affect and cognitions. *Journal of applied psychology*, 87(1), 131.
44. Imamoglu, G. (2011). The relationship between primary school teachers? Organizational commitment levels and organizational justice. *Unpublished Master Thesis*. Gazi University, Institute of Educational Sciences, Ankara.
45. Cropanzano, R., Bowen, D. E., & Gilliland, S. W. (2007). The management of organizational justice. *Academy of management perspectives*, 21(4), 34-48.
46. Demir, M. (2011). Effects of organizational justice, trust and commitment on employees' deviant behavior. *Anatolia*, 22(2), 204-221.
47. Ishak, N. A., & Alam, S. S. (2009). The effects of leader-member exchange on organizational justice and organizational citizenship behavior: Empirical study. *European Journal of Social Sciences*, 8(2), 324-334.
48. Sjahrudin, H., & Sudiro, A. A. (2013). Organizational justice, organizational commitment and trust in manager as predictor of organizational citizenship behavior. *Interdisciplinary J. of contemporary Res. Bus. (IJCRB)*, 4(12), 133-141.
49. Hassan, A., & Jubari, I. H. A. A. (2010). Organisational justice and employee work engagement: LMX as mediator. *Journal for International Business and Entrepreneurship Development*, 5(2), 167-178.
50. Cirka, C. C. (2005). When actions speak as loudly as words: Autonomy support, psychological empowerment and organizational citizenship behavior. *Handbook of organizational citizenship behavior*, 289-325.
51. Robbins, S. P., & Judge, T. A. (2008). Perilaku organisasi (Organizational behavior). *Jakarta: salemba empat*, 30-36.
52. Jehanzeb, K., & Mohanty, J. (2020). The mediating role of organizational commitment between organizational justice and organizational citizenship behavior: Power distance as moderator. *Personnel Review*, 49(2), 445-468.
53. Akyüz, Y. (2012). *The staggering rise of the South?* (No. 2012/3). Discussion Paper.
54. Disassa, A. (2014). Looking at Human Element in Education: Organizational Commitment and Job Satisfaction of Teachers at Adama Science and Technology University.
55. Ali Chughtai, A. (2016). Can ethical leaders enhance their followers' creativity?. *Leadership*, 12(2), 230-249.
56. Damirchi, E. S., Hazrati, S., & Poushaneh, K. (2013). Culture of peace: A move towards peace and peace-building. *Culture*, 3(13).
57. George, D., & Mallery, P. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference* (10th ed.). Boston: Pearson.
58. Ghafouri Varnosfaderani, M. R., & Golparvar, M. (2009). A survey of relationship between organizational justice with organizational commitment among staff of Esfahan municipality. *Journal of Psychological Studies*, 5(4), 129-148.
59. Gürbüz, S. (2006). Örgütsel vatandaşlık davranışı ile duygusal bağlılık arasındaki ilişkilerin belirlenmesine yönelik bir araştırma. *AİBÜ-İİBF Ekonomik ve Sosyal Araştırmalar Dergisi*.
60. Hannam, R., & Jimmieson, N. (2002). The relationship between extra-role behaviours and job burnout for primary school teachers: A preliminary model and development of an organisational citizenship behaviour scale. *Papers to be*, 1-17.
61. Ibrahim, M., & Aslinda, A. (2013). Relationship between organizational commitment and organizational citizenship behavior (OCB) at government owned corporation companies. *Journal of Public Administration and Governance*, 3(3), 35-42.
62. Jafri, M. H. (2010). Organizational commitment and employee's innovative behavior: A study in retail sector. *Journal of Management Research*, 10(1), 62-68.
63. Kıray, A. (2011). An empirical study towards identifying the relationship between organizational justice and organizational commitment. *Master's Degree, Çanakkale Onsekiz Mart University Institute of Social Sciences, Çanakkale, Turkey*.
64. Kuswanti, N. S., & Hamidah, T. (2018). The Role of Servant Leadership in Enhancing Organizational Citizenship Behavior Through Organizational Commitment as Mediator. *International Journal of Education, Learning and Development*, 6(9), 98-106.
65. Madsen, S. R., Miller, D., & John, C. R. (2005). Readiness for organizational change: do organizational commitment and social relationships in the workplace make a difference?. *Human resource development quarterly*, 16(2), 213-234.
66. Nastiezaie, N., & Jenaabadi, H. (2016). The relationship of organizational justice with positive organizational behavior and work engagement from viewpoint of faculty members of Zahedan University of medical sciences.
67. Oguz, H. (2011). A review from experimental trials on detoxification of aflatoxin in poultry feed. *Eurasian Journal of Veterinary Sciences*, 27(1), 1-12.
68. Polat, S., & Celep, C. (2008). Perceptions of secondary school teachers on organizational justice, organizational trust, organizational citizenship behaviors. *Educational Administration: Theory and Practice*, 14(54), 307-331.
69. Miao, R. T., & Kim, H. G. (2009, November). The impact of organizational citizenship behavior on team effectiveness

- in China: The moderating role of task complexity. In *2009 Fourth International Conference on Computer Sciences and Convergence Information Technology* (pp. 641-646). IEEE.
70. Salami, S. O., & Omole, O. A. (2005). Participation in decision-making process, incentives and training as predictors of organizational commitment among industrial workers. *African journal for the psychological study of social issues*, 8(2), 210-227.
71. Shekari, G. (2011). *Studying the relation between organizational justice and organizational commitment among the employees of Meezan financial institution of Mashhad in the year 2011* (Doctoral dissertation, MA thesis. Azad Eslami university of Mashad).
72. Teshome, T. (2013). The relationship between leadership styles and employee commitment in private higher education institutions at Addis Ababa City.
73. Turnipseed, D., & Murkison, G. (2000). Good soldiers and their syndrome: Organizational citizenship behavior and the work environment. *North American Journal of Psychology*, 2(2).
74. Vardi, Y., & Wiener, Y. (1996). Misbehavior in organizations: A motivational framework. *Organization science*, 7(2), 151-165.
75. Wajdee, M. E., Gurvinder, K., & Shehadehmofleh, A. (2018). Organizational justice and its relationship with organizational citizenship behavior of non-academic staff members at government universities in the north of Jordan. *Academy of Strategic Management Journal*, 17(6), 1-11.
76. Wasti, S. A. (2003). Organizational commitment, turnover intentions and the influence of cultural values. *Journal of Occupational and organizational Psychology*, 76(3), 303-321.
77. Williams, E. S., Rondeau, K. V., & Francescutti, L. H. (2007). Impact of culture on commitment, satisfaction, and extra-role behaviors among Canadian ER physicians. *Leadership in Health Services*, 20(3), 147-158.