



## The Effect of Transformational Leadership and Organizational Commitment with Job Satisfaction as Intervening Variable on Organizational Citizenship Behavior for the Environment (OCBE) - Case Study of Employees in Agency of Labor, Transmigration and Energy Special Capital Region of Jakarta

Olifia N. Sihombing<sup>1\*</sup>, M. Ali Iqbal<sup>2</sup>

Mercu Buana University

**Corresponding Author:** Olifia N. Sihombing [olif\\_n@hotmail.com](mailto:olif_n@hotmail.com)

---

### ARTICLE INFO

*Keywords:* Transformational Leadership, Organizational Commitment, Job Satisfaction, Organizational Citizenship Behavior For the Environment (OCBE)

*Received :*10, December

*Revised :* 19, January

*Accepted:* 25, February

©2024 Sihombing, Iqbal: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).



### ABSTRACT

The objective of this study is to investigate how transformational leadership, organizational commitment and job satisfaction as intervening variable would influence Organizational Citizenship Behavior for the Environment (OCBE) in Agency of Labor, Transmigration and Energy Special Capital Region of Jakarta. The method used in the study is quantitative method and the whole population is used as sample or known as non-probability sampling. Population of the study is civil servants with two-year minimum experience with a total of 93 people. The data was analysed with *Structural Equation Model* (SEM) using SmartPLS 4. The results show that transformational leadership influence job satisfaction, organizational commitment influence job satisfaction, transformational leadership influence OCBE, job satisfaction influence OCBE, organizational commitment has positive and significant impact on OCBE, transformational leadership through job satisfaction as intervening variable influence OCBE, organizational commitment through job satisfaction as intervening variable influence OCBE.

---

## **INTRODUCTION**

Climate change nowadays is regarded as worldwide main issue and being a focus of concerned especially after the United Nations Framework on Climate Change Conference was signed on June 14<sup>th</sup>,1992. Jakarta as a bustling megapolitan city has its own challenges in facing the issue of climate change. The municipal of Jakarta has issued many regulations in order to control the effect of climate change, one of them is Gubernuratorial Regulation No 90 in 2021 about Planning of Low Carbon Development. Moreover, municipal of Jakarta has put climate change and environmental views in designing and building Jakarta city as stated in the Jakarta Development Planning 2023 - 2026.

Lutfhi (2020) stated that a research done by PT Energy Management Indonesia (EMI) in 2016 found that government buildings are using more electricity compared with private-owned buildings, houses and industries. Furthermore, paper is still using widely in work activities which has effect on employee behavior on environment. It is also applied in Agency of Labor, Transmigration and Energy Special Capital Region of Jakarta (DTKTE) where most of administration activities are still using lots of paper such as mails, reports and financial documents. With a great level of paper consumption, naturally the paper waste is also voluminous. Undoubtedly, the expenses incurred for purchasing that paper also undergo an increase from year to year, as the ever-rising paper usage bears detrimental environmental consequences. Conversely, environmental concern can be demonstrated through prudent paper consumption.

Environmental consciousness as an individual behavior but not regulated by existing systems or rules is the application of Organizational Citizenship Behavior for the Environment (OCBE). Boiral (2002) states that OCBE represents an individual and societal behavior choice not explicitly visible through the existing reward systems or environmental management recognition rules, contributing to enhancing an organization's environmental management effectiveness. In their journal, Alt & Spitzeck (2016) also mention that the implementation of OCBE at the unit level requires employee involvement and the communicated leadership vision reaching down to that specific unit level.

This research aims to observe the OCBE behavior among DTKTE employees through a pre-survey involving 30 staff members. Lutfi's (2020) study, which the research conducted, mentions that based on previous research, there are 8 (eight) influential variables affecting OCBE. These variables include job satisfaction, organizational commitment, transformational leadership, green training, environmental concern, employee green behavior, organizational culture, and Psychological Ownership. From the pre-survey results, transformational leadership, organizational commitment, and job satisfaction are among the most influential variables affecting OCBE at the DTKTE office. A total of 11 participants (36.7%) chose transformational leadership, 9 participants (30%) chose organizational commitment, and 5 participants (16.7%) chose job satisfaction.

Based on pre-survey, researcher continued the survey regarding the three aforementioned variables. A majority of respondents (52.2%) stated that transformational leadership was not running optimally due to leaders not providing motivation for eco-friendly actions. Additionally, 57.8% of respondents did not experience optimal job satisfaction as they were not working according to their skills or interests and felt they would not be promoted quickly despite performing well. Furthermore, most respondents (58.9%) believed that the organizational commitment was not optimal because they did not wish to spend the rest of their career at the current workplace and would accept more lucrative offers from elsewhere. Consequently, the transformational leadership, job satisfaction, and organizational commitment at the DTKTE are still suboptimal and require enhancement to influence employee OCBE behavior.

Therefore, a problematic phenomenon emerged, characterized by the low level of OCBE behavior, prompting the researcher to conduct a study titled "The Influence of Transformational Leadership and Organizational Commitment with Job Satisfaction as an Intervening Variable on Organizational Citizenship Behavior for the Environment (OCBE) - A Case Study of Agency of Labor, Transmigration and Energy Special Capital Region of Jakarta (DTKTE)."

## **LITERATURE REVIEW**

### ***Social Learning Theory***

One of the greatest contributor on Social Learning Theory is Albert Bandura (1977), who stated that human learning basically is internally performed by individuals through observation of social group behaviors, not just based on responses to external stimuli. Bandura and Walters, in Panjaitan et al. (2020), mention that Social Learning Theory explains processes of learning and social behavior as individual or organizational actions acquiring knowledge culture through social interaction. Meanwhile, Pinho et al. (2020) say that Social Learning Theory is a cognitive process sequence involving social context and occurring through reciprocal interaction. Furthermore, this theory also combines behavior and cognitive approaches to learning for experiencing education. Beers et al. (2014) write that Social Learning Theory sheds light on cultural intelligence. Humans and organizations have specific behaviors and abilities to exchange information through culture or communication technology. Proctor and Niemeier (2020) stated that various studies above suggest that the complexity of behavior and learning in reciprocal interaction is a crucial success factor.

### ***Transformational Leadership Theory***

In Klein's (2023) writing, Bass and Riggio stated that transformational leadership stimulates and inspires followers to achieve extraordinary results and strengthens them in building and fulfilling their individual leadership capabilities. Another theory, as mentioned by Shamir et al. (1993), says that transformational leadership inspires through providing spirit in accordance with the mission and goals of leaders and organizations. By conducting

organizational mission-aligned identification, transformational leaders enhance employee involvement, collaboration, commitment, potential, and organizational performance. Furthermore, transformational leadership is complemented with motivation, inspiration, mission, task awareness, job satisfaction, attractive vision, and aspirations, where all of these influence employees' preparedness to pursue creative thinking.

### ***Organizational Commitment Theory***

Organizational commitment is an essential variable with a strong impact on job performance. In Eliyana et al. (2019), citing Tolentino (2013), it has been studied that commitment significantly correlates with job performance. According to Robbins (2006), organizational commitment is a state where employees identify with a group aligned with the organizational objectives and wish to remain members of that group. Luthans (2002) writes that organizational commitment is a strong desire to stay as a member of the organization, the aspiration to work hard as the organization's ethos, and a specific willingness to accept the organization's values and goals. In essence, this reflects employees' loyalty to the organization and the subsequent steps as a member of the organization with attention towards the organization's success and progress.

### ***Job Satisfaction Theory***

Popoola and Fagbola (2023) write that job satisfaction is a measure of how much employees are pleased with their work and work environment. Other theories mentioned from Popoola and Fagbola (2023) include Spector (2008), who defines job satisfaction as the extent to which employees like or dislike their work, and Gamlath and Kalaurachchi (2014), who view job satisfaction as a measure of how far employees' expectations related to their work are met. Understanding the definition of job satisfaction can lead to various positive outcomes for organizations, such as increasing work performance and productivity, achieving organizational goals, enhancing employee retention, reducing absenteeism, improving organizational value, increasing job commitment, fostering loyalty towards the organization, and promoting industrial harmony.

### ***Organizational Citizenship Behavior for the Environment (OCBE) Theory***

OCBE is an advancement from various early research on Organizational Citizenship Behavior (OCB) or behavior that constitutes individual choice and initiative, not related to the organization's formal reward system but collectively enhancing organizational effectiveness.

Ali et al. (2022) state that Robbins (2008) explains OCB as voluntary behavior that does not form part of a worker's formal job requirements but supports the functioning of their organization effectively. Azam et al. (2022) write that OCBE focuses on altruistic actions based on environmental activity beyond job obligations in an organization. For example, finding ways to create facilities and items while considering their impact on the environment or establishing work standards that affect the environment. Thus, OCBE refers to

goals and actions that positively impact the environment. This also helps organizations in minimizing environmental costs and enhancing their environmental value. Behaviors of OCBE not only provide efficiency for organizations in terms of the environment but also bridge the environmental gaps within the formal organizational system. A similar view is expressed by Daily et al. (2009) in Paille and Boiral (2013) who consider OCBE as altruistic actions performed by employees in an organization aimed at environmental improvement without any request or recognition from the organization. This includes initiatives such as sharing knowledge about pollution or ways to reduce waste at work, representing the organization in environmental activities, and collaborating to implement green technology. The growing complexity and sophistication of environmental issues today mean that environmental management is not solely carried out through formal systems.

#### ***Transformational Leadership and Organizational Citizenship Behavior for the Environment (OCBE)***

L. Mi et al. (2019) stated that transformational leadership has a positive impact on OCBE and can enhance employees' OCBE behavior. Similarly, I. Elshaer et al. (2022) mention that transformational leadership exerts a positive influence on OCBE.

H1: transformational leadership has positive effect on OCBE.

#### ***Organizational Commitment and Organizational Citizenship Behavior for the Environment (OCBE)***

Based on Zientara and Zamojska's (2016) research, it was found that organizational commitment has a positive impact on OCBE. Stritch and Christensen (2014) also state that organizational commitment has a positive effect on OCBE.

H2: organizational commitment has positive effect on OCBE.

#### ***Job Satisfaction and Organizational Citizenship Behavior for the Environment (OCBE)***

E. Sari et.al (2019) stated that job satisfaction had positive effect on OCBE. Moreover NH Kalimullah dan L. C. Nawangsari (2019) also wrote that job satisfaction had positive effect and significant on OCBE.

H3: job satisfaction has positive effect on OCBE.

#### ***Transformational Leadership and Job Satisfaction***

Research done by Arifiani et.al (2016) and Djuraidi dan Nur Laily (2020) concluded that transformational leadership had effect on job satisfaction.

H4: transformational leadership has positive effect on job satisfaction.

#### ***Organizational Commitment and Job Satisfaction***

Brian Hartono and Roy Setiawan (2013) conducted a study and found that organizational commitment has a positive and significant impact on job satisfaction. Prasetyo et al. (2020) also researched and concluded that organizational commitment has a significant effect on job satisfaction.

H5: organizational commitment has positive effect on job satisfaction.

*Transformational Leadership and Organizational Citizenship Behavior for the Environment (OCBE) through Job Satisfaction as Intervening Variable*

The research conducted by NH Kalimmulah and L. C. Nawangsari (2019) states that leadership through job satisfaction provides a significant positive effect on both partial and simultaneous OCBE behavior. Crucke et al. (2021) researched ways to improve green employee behavior and mentioned that transformational leadership has a positive impact on OCBE behavior.

H6: Transformational leadership has effect on OCBE through job satisfaction as intervening variable.

*Organizational Commitment and Organizational Citizenship Behavior for the Environment (OCBE) through Job Satisfaction as Intervening Variable*

Tang and Amini (2023) conducted a study on pro-environmental employee performance influenced by organizational green commitment and OCBE behavior. Nur Huda et al. (2021) also researched OCBE and wrote that job satisfaction affects OCBE behavior.

H7: organizational commitment had positive effect on OCBE through job satisfaction as intervening variable.

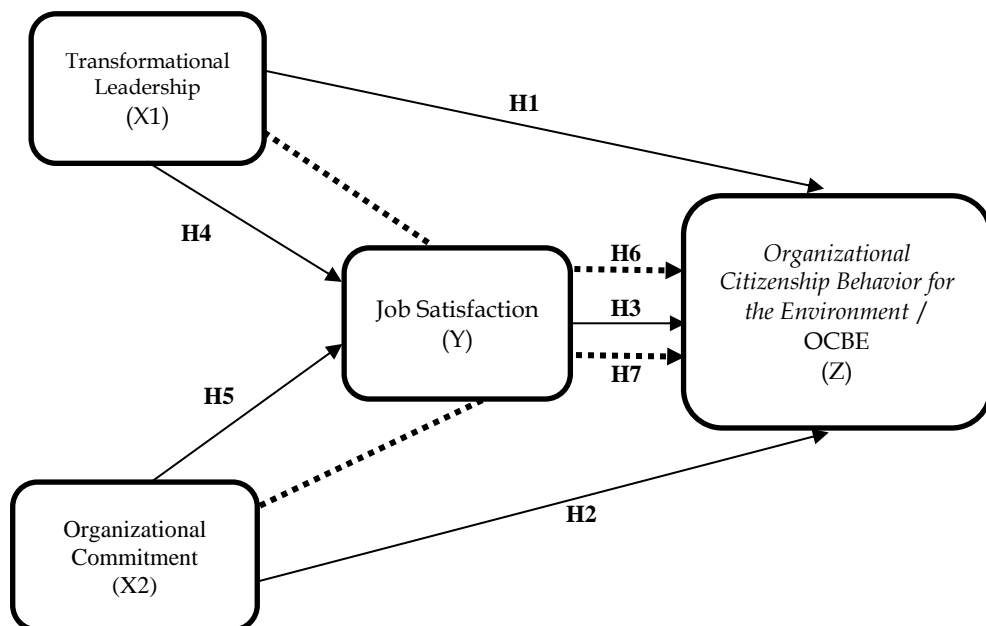


Figure 1. Conceptual Framework

## METHODOLOGY

This research is a causal study to test the hypothesis of the impact of several variables (independent variables) on another variable (dependent variable). The independent variables to be investigated are transformational leadership and organizational commitment and job satisfaction as an intervening variable. The variables and their effects will be studied to affect the dependent variable,

which is Organizational Citizenship Behavior for the Environment (OCBE). In this research, quantitative data will be used, and a systematic, scholarly investigation will be conducted on the components, phenomena, and their relationships.

The research employs a Likert scale for measurement and utilizes the entire civil servant population with more than 2 years of work experience, whom are 93 individuals stationed on Agency of Labor, Transmigration and Energy Special Capital Region of Jakarta (DTKTE). The data analysis method used is Structural Equation Modelling (SEM) with a Partial Least Square (PLS) approach, incorporating both the structural inner model and the measuring outer model.

## RESULTS

### *Description of Respondents*

Out of 93 respondents, data were collected from 90 respondents who answered with details as below:

Table 1. Description of Respondents

Gender	Amount	Percentage
Male	44	48,3%
Female	46	51,7%
Total	90	100%

Educational Background	Amount	Percentage
SMU/Sederajat	2	2,2%
Diploma	5	5,6%
Sarjana S1	70	77,8%
Sarjana S2/S3	13	14,4%
Total	90	100%

Work Experience	Amount	Percentage
< 5 years	12	13,3%
5 - 10 years	21	23,3%
11 - 20 years	26	28,9%
> 20 years	31	33,4%
Total	90	100%

Age	Amount	Percentage
< 25 years old	0	0%
25 - 35 years old	31	34,4%
36 - 50 years old	31	34,4%
> 50 years old	28	31,3%
Total	90	100%

Source: Data processed using SmartPLS 4 (2023)

From the previous table, majority of respondents which made of 46 persons or 51,7% were female and 48,3% were male. In general, the number of male and female respondents is not significantly different. The majority of the respondents, 70 individuals (77.8%), have a Bachelor's Degree (S1). Thirteen respondents (14.4%) hold Master's Degrees (S2 and S3), while 5.6% of the respondents, or 5 individuals, have a Diploma. Only 2 people (2.2%) possess a Master's/Equivalent Degree. A large portion of the respondents, 31 individuals (33.4%), have over 20 years of work experience. The highest percentage of respondents, 26 individuals (28.9%), have been working for 11 to 20 years. Then, 21 respondents (23.3%) have a work experience of 5 to 10 years, and the remaining 12 individuals (13.1%) have less than 5 years of work experience. The age range of the respondents between 25 and 35 years old and between 36 and 50 years old is the same, with 31 individuals (34.4%). The rest of the respondents are those aged over 50 years, totaling 28 individuals (31.3%).

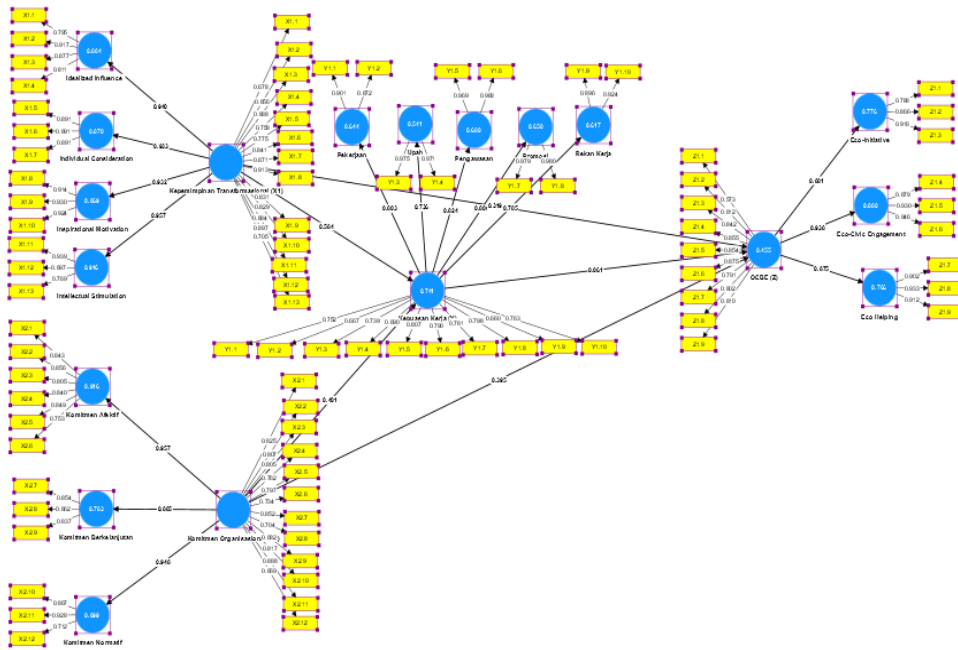
### ***Data Analysis***

#### *Validity Test (Outer Model Measurement)*

In this study, the validity criteria were based on the reflective indicator model measured through validity analysis (convergent validity, discriminant validity) and reliability analysis (Cronbach's alpha and composite reliability). Indicators are considered to meet convergent validity if the factor loading value is greater than 0.7 and demonstrated by an Average Variance Extracted (AVE) value above 0.50. Reliability of the construct is measured using Composite Reliability and Cronbach's Alpha. The construct is said to be reliable if it has a Composite Reliability value greater than 0.70 and a Cronbach's Alpha above 0.60 (Ghozali, 2016). The convergent validity testing results with factor loadings can be seen in the following figures and tables:



Figure 2. Convergen Validity Test with *Loading Factor*



Source: Processing data using SmartPLS 4

Table 2. Convergen Validity Test with *Loading Factor*

Variable	Dimention	Indicator Code	Outer Loading	Condition	Remarks
Transformational Leadership	1.1 Idealized influence	X1.1	0,678	> 0,7	Acceptable
		X1.2	0,856	> 0,7	Valid
		X1.3	0,888	> 0,7	Valid
		X1.4	0,758	> 0,7	Valid
	1.2 Individual consideration	X1.5	0,775	> 0,7	Valid
		X1.6	0,841	> 0,7	Valid
		X1.7	0,871	> 0,7	Valid
	1.3 Inspirational motivation	X1.8	0,913	> 0,7	Valid
		X1.9	0,831	> 0,7	Valid
	1.4 Intellectual stimulation	X1.10	0,829	> 0,7	Valid
		X1.11	0,884	> 0,7	Valid
		X1.12	0,897	> 0,7	Valid
		X1.13	0,705	> 0,7	Valid
Organizational Commitment	2.1 Affective Commitment	X2.1	0,825	> 0,7	Valid
		X2.2	0,807	> 0,7	Valid
		X2.3	0,805	> 0,7	Valid
		X2.4	0,762	> 0,7	Valid
		X2.5	0,797	> 0,7	Valid
		X2.6	0,734	> 0,7	Valid
	2.2 Continuous Commitment	X2.7	0,852	> 0,7	Valid
		X2.8	0,704	> 0,7	Valid
		X2.9	0,682	> 0,7	Acceptable

	2.3 Normative Commitment	X2.10	0,817	> 0,7	Valid
		X2.11	0,888	> 0,7	Valid
		X2.12	0,669	> 0,7	Acceptable
<b>Job Satisfaction</b>	3.1 Work	Y1.1	0,752	> 0,7	Valid
		Y1.2	0,667	> 0,7	Acceptable
	3.2 Wage	Y1.3	0,739	> 0,7	Valid
		Y1.4	0,690	> 0,7	Acceptable
	3.3 Supervision	Y1.5	0,807	> 0,7	Valid
		Y1.6	0,790	> 0,7	Valid
	3.4 Promotion	Y1.7	0,781	> 0,7	Valid
		Y1.8	0,798	> 0,7	Valid
	3.5 Co-Worker	Y1.9	0,660	> 0,7	Acceptable
		Y1.10	0,763	> 0,7	Valid
<b>Organizational Behaviour for the Environment (OCBE)</b>	4.1 Eco-Initiative	Z1.1	0,573	> 0,7	Acceptable
		Z1.2	0,812	> 0,7	Valid
		Z1.3	0,842	> 0,7	Valid
	4.2 Eco-civic Engagement	Z1.4	0,855	> 0,7	Valid
		Z1.5	0,854	> 0,7	Valid
		Z1.6	0,875	> 0,7	Valid
		Z1.7	0,791	> 0,7	Valid
	4.3 Eco-Helping	Z1.8	0,802	> 0,7	Valid
		Z1.9	0,810	> 0,7	Valid

Source: Data processed using SmartPLS 4

The magnitude of the relationship between each latent variable and its respective dimension can be observed from the factor loading value in Table 2 above. From this table, the obtained factor loadings range from above 0.5, indicating that all existing variables are capable of measuring their respective dimensions.

Table 3. Average Variance Extracted (AVE)

Variable	Dimension	AVE	Remarks
Transformational Leadership	1.1 Idealized influence	0,725	Valid
	1.2 Individual consideration	0,794	Valid
	1.3 Inspirational motivation	0,851	Valid
	1.4 Intellectual stimulation	0,759	Valid
Organizational Commitment	2.1 Affective Commitment	0,681	Valid
	2.2 Continuous Commitment	0,725	Valid
	2.3 Normative Commitment	0,707	Valid
Job Satisfaction	3.1 Work	0,786	Valid
	3.2 Wage	0,946	Valid
	3.3 Supervision	0,938	Valid
	3.4 Promotion	0,959	Valid
	3.5 Co-Worker	0,828	Valid
Organizational Behaviour for the Environment (OCBE)	4.1 Eco-Initiative	0,737	Valid
	4.2 Eco-civic Engagement	0,844	Valid
	4.3 Eco-Helping	0,839	Valid

Source: Data processed using SmartPLS 4

In Table 3 above, the AVE values for the Transformational Leadership, Organizational Commitment, Job Satisfaction, and OCBE variables are greater than 0.50. Thus, it can be inferred that the variables and dimensions used in this study have good convergent validity, and the indicators are considered valid for measuring their respective dimensions or variables.

The next validity test is discriminant validity, which is used to demonstrate whether the dimensions of a construct will have a higher value than the constructed construct itself. This test is based on the measurement's cross-loading values with the construct and AVE. Here are the results of the discriminant validity from the cross-loading values between indicators and their respective constructs:

Table 4. Cross Loading Test Result (Discriminant Validity)

	Idealized Influence	Individual Consideration	Inspirational Motivation	Intellectual Stimulation	Komitmen Afektif	Komitmen Berkelanjutan	Komitmen Normatif	Pekerjaan	Upah	Pengawasan	Promosi	Rekan Kerja	Eco-civic initiative	Eco-Civic Engagement	Eco Helping
X1.1	0.795	0.579	0.576	0.568	0.509	0.433	0.498	0.505	0.356	0.588	0.342	0.372	0.372	0.392	0.320
X1.2	0.917	0.733	0.760	0.784	0.553	0.527	0.542	0.605	0.522	0.751	0.533	0.549	0.398	0.456	0.438
X1.3	0.877	0.814	0.822	0.821	0.411	0.375	0.428	0.439	0.454	0.709	0.535	0.492	0.362	0.386	0.464
X1.4	0.811	0.735	0.600	0.690	0.428	0.297	0.341	0.462	0.447	0.626	0.344	0.561	0.491	0.395	0.287
X1.5	0.682	0.891	0.613	0.750	0.283	0.096	0.254	0.450	0.282	0.696	0.368	0.569	0.436	0.335	0.317
X1.6	0.787	0.891	0.739	0.753	0.366	0.313	0.388	0.482	0.390	0.701	0.359	0.483	0.372	0.308	0.253
X1.7	0.786	0.891	0.781	0.829	0.328	0.222	0.381	0.416	0.395	0.678	0.416	0.570	0.482	0.496	0.478
X1.8	0.871	0.785	0.914	0.857	0.503	0.445	0.526	0.534	0.469	0.717	0.560	0.605	0.382	0.477	0.499
X1.9	0.661	0.739	0.930	0.814	0.335	0.236	0.407	0.432	0.419	0.584	0.441	0.510	0.470	0.502	0.531
X1.10	0.722	0.690	0.924	0.784	0.369	0.363	0.469	0.461	0.497	0.655	0.592	0.446	0.269	0.393	0.474
X1.11	0.783	0.777	0.835	0.939	0.449	0.307	0.425	0.396	0.433	0.630	0.539	0.593	0.493	0.543	0.563
X1.12	0.814	0.827	0.845	0.897	0.477	0.351	0.482	0.511	0.559	0.730	0.656	0.599	0.395	0.485	0.499
X1.13	0.605	0.672	0.622	0.769	0.301	0.284	0.310	0.477	0.415	0.521	0.310	0.532	0.494	0.318	0.419
X2.1	0.354	0.186	0.215	0.264	0.843	0.665	0.750	0.498	0.426	0.315	0.417	0.278	0.446	0.438	0.337
X2.2	0.601	0.417	0.456	0.514	0.856	0.642	0.666	0.655	0.425	0.565	0.540	0.578	0.498	0.451	0.448
X2.3	0.543	0.270	0.378	0.424	0.805	0.689	0.719	0.525	0.536	0.449	0.566	0.414	0.385	0.369	0.432
X2.4	0.274	0.181	0.258	0.291	0.840	0.519	0.659	0.330	0.278	0.309	0.440	0.416	0.481	0.506	0.537
X2.5	0.551	0.408	0.482	0.481	0.849	0.580	0.700	0.516	0.331	0.493	0.414	0.530	0.572	0.605	0.590
X2.6	0.412	0.355	0.390	0.381	0.753	0.536	0.703	0.516	0.300	0.459	0.548	0.419	0.483	0.532	0.470
X2.7	0.527	0.319	0.439	0.451	0.761	0.854	0.815	0.605	0.581	0.384	0.510	0.492	0.434	0.369	0.401
X2.8	0.479	0.276	0.389	0.376	0.557	0.862	0.666	0.368	0.340	0.391	0.330	0.327	0.355	0.325	0.358
X2.9	0.186	-0.016	0.114	0.058	0.531	0.837	0.672	0.313	0.209	0.221	0.397	0.184	0.085	0.181	0.226
X2.10	0.423	0.247	0.430	0.378	0.702	0.795	0.867	0.381	0.361	0.453	0.596	0.367	0.308	0.436	0.446
X2.11	0.405	0.259	0.367	0.327	0.794	0.817	0.928	0.516	0.456	0.363	0.470	0.418	0.362	0.326	0.383
X2.12	0.538	0.515	0.516	0.520	0.636	0.498	0.712	0.562	0.403	0.449	0.306	0.498	0.594	0.534	0.434
Y1.1	0.588	0.500	0.483	0.536	0.588	0.569	0.602	0.901	0.562	0.546	0.449	0.560	0.488	0.396	0.320
Y1.2	0.449	0.387	0.431	0.388	0.500	0.337	0.398	0.872	0.343	0.552	0.516	0.373	0.446	0.491	0.375
Y1.3	0.522	0.411	0.534	0.577	0.480	0.463	0.496	0.551	0.975	0.406	0.519	0.509	0.357	0.343	0.462
Y1.4	0.500	0.369	0.437	0.471	0.427	0.431	0.441	0.453	0.971	0.408	0.481	0.443	0.216	0.247	0.319
Y1.5	0.755	0.777	0.682	0.694	0.513	0.379	0.493	0.634	0.404	0.969	0.534	0.618	0.427	0.429	0.381
Y1.6	0.775	0.727	0.693	0.711	0.501	0.386	0.464	0.564	0.407	0.966	0.594	0.541	0.336	0.411	0.366
Y1.7	0.460	0.369	0.536	0.535	0.568	0.454	0.513	0.529	0.498	0.555	0.979	0.490	0.219	0.463	0.529
Y1.8	0.565	0.469	0.593	0.619	0.596	0.509	0.568	0.533	0.510	0.584	0.980	0.509	0.226	0.446	0.547
Y1.9	0.514	0.594	0.523	0.565	0.393	0.331	0.432	0.445	0.420	0.534	0.344	0.896	0.467	0.327	0.383
Y1.10	0.545	0.516	0.511	0.632	0.564	0.405	0.476	0.519	0.470	0.555	0.570	0.924	0.411	0.415	0.555
Z1.1	0.391	0.432	0.297	0.374	0.438	0.222	0.392	0.447	0.280	0.311	0.029	0.311	0.788	0.517	0.268
Z1.2	0.393	0.393	0.378	0.462	0.533	0.417	0.449	0.496	0.275	0.362	0.316	0.499	0.866	0.716	0.627
Z1.3	0.437	0.433	0.361	0.497	0.510	0.260	0.406	0.426	0.223	0.343	0.196	0.404	0.916	0.751	0.626
Z1.4	0.348	0.290	0.354	0.396	0.560	0.250	0.362	0.414	0.254	0.275	0.362	0.361	0.728	0.879	0.693
Z1.5	0.497	0.456	0.460	0.480	0.544	0.401	0.522	0.491	0.223	0.496	0.383	0.401	0.756	0.930	0.604
Z1.6	0.470	0.435	0.552	0.563	0.507	0.312	0.491	0.463	0.362	0.423	0.531	0.370	0.676	0.946	0.714
Z1.7	0.426	0.370	0.493	0.512	0.551	0.429	0.493	0.469	0.349	0.387	0.530	0.461	0.558	0.662	0.902
Z1.8	0.383	0.316	0.462	0.507	0.510	0.273	0.396	0.347	0.376	0.319	0.513	0.530	0.555	0.866	0.933
Z1.9	0.425	0.399	0.538	0.547	0.497	0.378	0.472	0.258	0.384	0.354	0.467	0.444	0.584	0.678	0.912

Source: Processing data using SmartPLS 4

To obtain valid results, each dimension's relationship with its variable must be greater than its relationship with any other variable. From Table 4 above, it can be seen that the factor loading of each dimension on its latent variable (marked in blue) is proven to be greater than the relationship with other latent variables, thus suggesting that discriminant validity is satisfied.

The next reliability test is assessing the Cronbach's Alpha value. A construct is considered reliable if it has a Cronbach's Alpha above 0.60 (Ghozali

and Latan, 2015). Here is the output from the outer model's Composite Reliability and Cronbach's Alpha.

Table 5. Composite Reliability Value and Cronbach's Alpha

Variable	Dimension	Composite Reliability	Cronbach's Alpha	Remarks
Transformational Leadership	1.1 Idealized influence	0,884	0,873	Reliable
	1.2 Individual consideration	0,873	0,870	Reliable
	1.3 Inspirational motivation	0,915	0,913	Reliable
	1.4 Intellectual stimulation	0,858	0,839	Reliable
Organizational Commitment	2.1 Affective Commitment	0,907	0,906	Reliable
	2.2 Continuous Commitment	0,821	0,812	Reliable
	2.3 Normative Commitment	0,813	0,787	Reliable
Job Satisfaction	3.1 Work	0,735	0,728	Reliable
	3.2 Wage	0,946	0,943	Reliable
	3.3 Supervision	0,935	0,934	Reliable
	3.4 Promotion	0,958	0,958	Reliable
	3.5 Co-Worker	0,805	0,794	Reliable
Organizational Behaviour for the Environment (OCBE)	4.1 Eco-Initiative	0,852	0,822	Reliable
	4.2 Eco-civic Engagement	0,907	0,907	Reliable
	4.3 Eco-Helping	0,904	0,904	Reliable

Source: Data processed using SmartPLS 4

From Table 5 above, it can be seen that each variable has a Composite Reliability value greater than 0.7. Additionally, the Cronbach's Alpha value from the research model indicates that each variable has a value above 0.60. Therefore, it can be inferred that the research model has met the criteria for Composite Reliability and Cronbach's Alpha, thus satisfying the criterion of reliability.

#### **Structural Measurement Test (Inner Model)**

This model represents the specification of the relationship between latent variables, also known as inner relations. The testing consists of two stages: the first is the Coefficient of Determination R Square (R<sup>2</sup>) test, which measures how much the latent independent variable explains the variance of the latent dependent variable. The second stage involves hypothesis testing, which assesses the research model's hypotheses.

Table 6. *R Square*

<b>Construct</b>	<b><i>R Square</i></b>	<b><i>R Square Adjusted</i></b>
Job Satisfaction	0,741	0,745
OCBE	0,455	0,436

Source: Data processed using SmartPLS 4

From Table 6 above, it can be observed that the relationship among constructs, based on the R Square value, indicates that 45.5% of the OCBE variable is influenced by the transformational leadership, organizational commitment, and job satisfaction, and 54.5% is affected by other variables outside this study. The R Square value of 45.5% for the OCBE variable also means that the exogenous variables (transformational leadership, organizational commitment, and job satisfaction) have a moderate to moderate-high influence in predicting the endogenous latent variable (OCBE). Meanwhile, 74.1% of job satisfaction is influenced by transformational leadership and organizational commitment, with the remaining 25.9% being affected by other variables outside this study.

Table 7. Effect Size ( $f^2$ )

<b>Effect</b>	<b>Result</b>	<b>Remarks</b>
Transformational Leadership → OCBE	0,070	Weak
Organizational Commitment → OCBE	0,146	Medium
Job Satisfaction → OCBE	0,002	Weak
Transformational Leadership → Job Satisfaction	0,975	Strong
Organizational Commitment → Job Satisfaction	0,459	Strong

Source: Data processed using SmartPLS 4

As seen in Table 7 above, the transformational leadership variable has a weak impact on influencing the OCBE variable with an effect size of 0.070. Organizational commitment, on the other hand, has a medium effect size of 0.146 on OCBE. Job satisfaction has a weak impact on OCBE with an effect size value of 0.002. The transformational leadership variable has a strong effect on job satisfaction, with an effect size of 0.975. Similarly, the organizational commitment variable has a strong impact on job satisfaction, with an effect size of 0.459.

Hypothesis testing is used to examine the presence or absence of the influence of independent variables on dependent variables. In SmartPLS, the significance of path coefficients is tested using bootstrapping. The calculation of

hypothesis testing can be observed through the Path Coefficient value, which represents the t-statistic of the relationship between variables in the study.

Table 8. Path Coefficient, t-Statistics and P-Values

Construct Effect	Original Sample (O)	t-Statistics ( O/STDEVI)	P Values	Result
<b>Direct Impact</b>				
Transformational Leadership → OCBE	0,319	2,422	0,008	Positive and significant
Organizational Commitment → OCBE	0,395	2,360	0,009	Positive and significant
Job Satisfaction → OCBE	0,061	0,309	0,379	Positive but not significant
Transformational Leadership → Job Satisfaction	0,584	6,640	0,000	Positive and significant
Organizational Commitment → Job Satisfaction	0,401	4,126	0,000	Positive and significant
<b>Indirect Impact</b>				
Transformational Leadership → Job Satisfaction → OCBE	0.036	0.311	0.378	Positive but not significant
Organizational Commitment → Job Satisfaction → OCBE	0.025	0.286	0.387	Positive but not significant

Source: Data processed using SmartPLS 4

Based on the hypothesis testing results in Table 8 above, transformational leadership has a positive path coefficient of 0.319, a t-statistics value of 2.422 (greater than 1.64), and a p-value of 0.008 (less than 0.05). Therefore, hypothesis H1 "Transformational leadership has a positive effect on OCBE" can be accepted.

Consequently, the influence of organizational commitment on OCBE has a positive path coefficient of 0.395, a t-statistics value of 2.360 (greater than 1.64), and a p-value of 0.009 (less than 0.05). Thus, hypothesis H2 "Organizational Commitment has a positive effect on OCBE" can be accepted.

From Table 8 above, the impact of job satisfaction on OCBE has a positive path coefficient of 0.061, a t-statistics value of 0.309 (less than 1.64), and a p-value of 0.379 (greater than 0.05). Therefore, hypothesis H3 "Job Satisfaction has a positive effect on OCBE" is accepted but not significant.

The influence of transformational leadership on job satisfaction has a positive path coefficient of 0.584, a t-statistics value of 6.640 (greater than 1.64), and a p-value of 0.000 (less than 0.05). Thus, hypothesis H4 "Transformational Leadership has a positive effect on Job Satisfaction" can be accepted.

From Table 8 above, the influence of organizational commitment on job satisfaction has a positive path coefficient of 0.401, a t-statistics value of 4.126 (greater than 1.64), and a p-value of 0.000 (less than 0.05). Consequently, hypothesis H5 "Organizational Commitment has a positive effect on Job Satisfaction" can be accepted.

The influence of Transformational Leadership on OCBE with Job Satisfaction as an intervening variable has a positive path coefficient of 0.036, a t-statistics value of 0.311 (less than 1.64), and a p-value of 0.378 (greater than 0.05). Therefore, hypothesis H6 "Transformational Leadership on OCBE with Job Satisfaction as an intervening variable" can be accepted but is not significant.

The influence of Organizational Commitment on OCBE with Job Satisfaction as an intervening variable has a positive path coefficient of 0.025, a t-statistics value of 0.286 (less than 1.64), and a p-value of 0.387 (greater than 0.05). Consequently, hypothesis H7 "Organizational Commitment has a positive effect on OCBE with Job Satisfaction as an intervening variable" can be accepted but is not significant.

Table 9. Dimention Correlation Values

		Correlation							
		Job Satisfaction (Y1)					OCBE (Z1)		
Variable	Dimention	3.1 Work	3.2 Wage	3.3 Super vision	3.4 Prom otion	3.5 Co-worke r	4.1 Eco-initiativ e	4.2 Eco-civic engag ement	4.3 Eco-helping
Transformational Leadership (X1)	1.1 Idealized influence	0,589	0,526	0,789	0,524	0,582	0,473	0,478	0,449
	1.2 Individual consideration	0,504	0,402	0,777	0,429	0,606	0,483	0,429	0,395
	1.3 nspirational motivation	0,517	0,501	0,709	0,576	0,567	0,406	0,497	0,543
	1.4 Intellectual stimulation	0,526	0,541	0,725	0,590	0,660	0,523	0,523	0,570
Organizational Commitment (X2)	2.1 Affective Commitment	0,616	0,467	0,523	0,594	0,532	0,578	0,584	0,567
	2.2 Continuous Commitment	0,518	0,460	0,395	0,492	0,407	0,355	0,350	0,393
	2.3 Normative Commitment	0,570	0,482	0,494	0,552	0,500	0,483	0,499	0,495
Job Satisfaction (Y1)	3.1 Work	-	-	-	-	-	0,528	0,497	0,390
	3.2 Wage	-	-	-	-	-	0,395	0,434	0,386
	3.3 Supervision	-	-	-	-	-	0,227	0,464	0,549
	3.4 Promotion	-	-	-	-	-	0,480	0,411	0,522
	3.5 Co-Worker	-	-	-	-	-	0,297	0,305	0,404

Source: Data processed using SmartPLS 4

From Table 9 above, regarding the variables transformational leadership (X1) and job satisfaction (Y1), the highest dimension values are idealized influence (0.789), indicating a strong relationship level. Therefore, the idealized influence dimension in transformational leadership (X1) is highly required for

every increase in Job Satisfaction (Y1), particularly in the supervision dimension. In the organizational commitment (X2) and job satisfaction (Y1) variables, the highest dimension values are affective commitment (0.616), so the affective commitment dimension in organizational commitment (X2) is highly required for every increase in job satisfaction (Y1), particularly in the work dimension. In the transformational leadership (X1) and OCBE (Z1) variables, the highest values are intellectual stimulation (0.570), making the intellectual stimulation dimension in transformational leadership (X1) highly required for every increase in OCBE behavior, especially in the eco-helping dimension. In the job satisfaction (Y1) and OCBE (Z1) variables, the highest values are supervision (0.549), so the Supervision dimension in job satisfaction (Y1) is highly required for every increase in OCBE behavior, particularly in the eco-helping dimension. In the organizational commitment (X2) and OCBE (Z1) variables, the highest values are affective commitment (0.584), meaning the affective commitment dimension in organizational commitment (X2) is highly required for every increase in OCBE behavior, especially in the eco-civic engagement dimension.

## **DISCUSSION**

The data analysis results indicate that transformational leadership has a positive and significant impact on job satisfaction and OCBE behavior, organizational commitment has a positive and significant impact on job satisfaction and OCBE behavior as well as job satisfaction, and a positive but non-significant impact on OCBE behavior. Furthermore, the influence of transformational leadership on OCBE with job satisfaction as an intervening variable is positive but non-significant, and the impact of organizational commitment on OCBE with job satisfaction as an intervening variable is positive but insignificant.

## **CONCLUSION AND RECOMMENDATION**

From this research, it is evident that transformational leadership, organizational commitment, and job satisfaction have an impact on OCBE employee behavior in the Dinas Tenaga Kerja, Transmigrasi, and Energi DKI Jakarta. Transformational leadership and organizational commitment also affect employee job satisfaction. Transformational leadership influences OCBE behavior through the intervening variable of job satisfaction positively but non-significantly. Organizational commitment has a positive effect on OCBE behavior through the variable of job satisfaction but remains non-significant. Therefore, leaders should be role models and exemplars for their staff in enhancing eco-conscious behavior. Additionally, environmental training and socialization, reward and punishment mechanisms for eco-friendly behavior, and the implementation of more environmentally friendly work systems can be considered.



## FURTHER STUDY

This study can serve as a reference for future research. In this study, transformational leadership has a positive but non-significant impact on OCBE with job satisfaction as an intervening variable. Similarly, organizational commitment has a positive effect on OCBE with job satisfaction as an intervening variable but remains non-significant. Considering that the majority of respondents have worked for more than 11 years, environmental concern has not been seen as crucial until now. The scope and work environment of the Agency of Labor, Transmigration and Energy (DTKTE) does not involve significant environmental concerns. Thus, further research can be conducted to explore the development of other variables that may influence employees' eco-conscious behavior. Additionally, to enhance the accuracy of the research data, using more secondary data is recommended.

## REFERENCES

- Ali, H., Sastrodiharjo, I., Saputra, F. (2022). Pengukuran Organizational Citizenship Behavior: Beban Kerja, Budaya Kerja dan Motivasi (Studi Literature Review), *Jurnal Ilmu Multidisiplin*, 1 (1), DOI: 10.38035/jim.v1i1.
- Alt, E. & Spitzack, H. (2016). Improving environmental performance through unit-level organizational citizenship behaviors for the environment: A capability perspective, *Journal of Environmental Management*, 182, 48-58, DOI: 10.1016/j.jenvman.2016.07.034.
- Arifiani, R., S., Astuti, E., S. & Ruhana, I. (2016). Pengaruh Kepemimpinan Transformasional Terhadap Organizational Citizenship Behavior dan Kepuasan Kerja. *Jurnal Administrasi Bisnis*, 33 (1), 127-135.
- Azam, T., Malik, S., Y., Ren, D., Yuan, W., Mughai, Y., H., Ullah, I., Flaz, M. & Riaz, S. (2022). The Moderating Role of Organizational Citizenship Behavior Toward Environment on Relationship Between Green Supply Chain Management Practices and Sustainable Performance. *Frontiers in Psychology*, 13:876516, DOI: 10.3389/fpsyg.2022.876516.
- Bandura, A. (1977). *Social Learning Theory*. Prentice-Hall. New Jersey.
- Beers, P., J., Hermans, F., Veldkamp, T. & Hinssen, J. (2014). Social Learning Inside and Outside Transition Projects: Playing Free Jazz for A Heavy Metal Audience. *NJAS-Wageningen Journal of Life Sciences*, 69, 5-13. DOI: 10.1016/j.njas.2013.10.001.
- Boiral, O. & Paillé, P. (2013). Pro-Environmental at Work: Construct Validity and Determinants. *Journal of Environmental Psychology*, 36, 118-128. DOI: 10.1016/j.jenvp.2013.07.014.

- Boiral, O. (2002). Tacit Knowledge and Environmental Management. *Long Range Planning*, 35 (3), 291-317, DOI: 10.1016/S0024-6301(02)00047-X.
- Crucke, S., Servaes, M., Kluijtmans, T. & Mertens, S. (2021). Linking Environmentally-Specific Transformational Leadership and Employees' Green Advocacy: The Influence of Leadership Integrity. *Corporate Social Responsibility and Environmental Management*, 29 (2), 406 - 420. DOI: 10.1002/csr.2208.
- Djuraidi, A. & Laily, N. (2020). Pengaruh Kepemimpinan Transformasional terhadap Kinerja Karyawan Melalui Kepuasan Kerja sebagai Variabel Moderating. *Jurnal Riset Ekonomi dan Bisnis*, 13(1), 1-13. DOI: <http://dx.doi.org/10.26623/jreb.v13i1.2182>.
- Eliyana, A., Maarif, S., Muzakki. (2019). Job Satisfaction and Organizational Commitment Effect in the Transformational Leadership toward Employee Performance, *European Research on Management and Business Economics*, 25 (3), 144-150, DOI: 10.1016/j.iedeen.2019.05.001.
- Elshaer, I., A., Abdelrahman M., A., Azazz, A., M., S., Alrawad, M., Fayyad, S. (2022). Environmental Transformational Leadership and Green Innovation in the Hotel Industry: Two Moderated Mediation Analyses. *International Journal of Environmental Research Public Health*, 19 (24), 16800. DOI: 10.3390/ijerph192416800.
- Hartono, B. & Setiawan, S. (2013). Pengaruh Komitmen Organisasional Terhadap Kepuasan Kerja Karyawan Paparon's Pizza City of Tomorrow. *AGORA*, 1 (1), 1 - 8.
- Hur Huda, M., Nawangsari, L., C., Sutawijaya, A., H. (2021). The Factors that Influence Organizational Citizenship Behaviour for The Environment. *International Review of Management and Marketing*. 11(3), 85-95, DOI: 10.32479/irmm.10779.
- Kalimullah, A., M., N., H., Nawangsari, L., C. (2019). Organization Citizenship Behavior for The Environment at Financial Institutions. *Dinasti International Journal of Education Management and Social Science*. 1(2), 138-149. DOI: 10.31933/dijemss.v1i2.66.
- Klein, G. (2023). Transformational and Transactional Leadership, Organizational Support and Environmental Competition Intensity as Antecedents of Intrapreneurial Behaviors, *European Research on Management and Business Economics*, 29 (2), DOI: 10.1016/j.iedeen.2023.100215.
- Luthans, F. (2002). The need for and meaning of positive organization behavior. *Journal of Organizational Behavior*, 23(6), 695-706. DOI: 10.1002/job.165.

- Luthfi, F. (2020). Pengaruh Kepemimpinan Transformasional dan Komitmen Organisasional terhadap Organizational Citizenship Behavior for the Environment (OCBE) dengan Kepuasan Kerja sebagai Variabel Intervening (Studi Kasus Pegawai Suku Dinas Cipta Karya, Tata Ruang dan Pertanahan Kota Administrasi Jakarta Utara). Tesis Program Studi Magister Manajemen Program Pascasarjana, Universitas Mercu Buana, Jakarta.
- Mi, L., Gan, X., Xu, T., Long, R., Qiao, L., Zhu, H. (2019). A New Perspective to Promote Organizational Citizenship Behaviour for the Environment: The Role of Transformational Leadership. *Journal of Cleaner Production*, 239, DOI: 10.1016/j.jclepro.2019.118002.
- Panjaitan, J., M., P., Timur, R., P., Sumiyana, S. (2020). How Does The Government of Indonesia Empower SMEs? An Analysis of the Social Cognition Found in Newspapers. *Journal of Entrepreneurship in Emerging Economics*. 13 (5). 765-790. DOI: 10.1108/JEEE-04-2020-0087.
- Pinho, C., Franco, M. & Mendes, L. (2020). Exploring The Conditions of Success in E-Libraries in The Higher Education Context Through The Lens of The Social Learning Theory. *Information & Management*, 57 (4), DOI: 10.1016/j.im.2019.103208.
- Popoola, S., O. & Fagbola, O., O. (2023). Work Motivation, Job Satisfaction, Work-Family Balance, and Job Commitment of Library Personnel in Universities in North-Central Nigeria, *The Journal of Academic Librarianship*, 49 (4), DOI: 10.1016/j.acalib.2023.102741.
- Prasetyo, E., J., Ratnasari, S., L. & Hakim, L. (2020). Analisis Gaya Kepemimpinan, Komitmen Organisasional, Budaya Organisasi, dan Lingkungan Kerja Terhadap Kepuasan Kerja Karyawan. *Jurnal Dimensi*, 9 (2), 186-201. DOI: 10.33373/dms.v9i2.2531.
- Proctor, K., R. & Niemeyer, R., E. (2020). Retrofitting Social Learning Theory with Contemporary Understandings of Learning and Memory Derived from Cognitive Psychology and Neuroscience. *Journal of Criminal Justice*, 66. DOI: 10.1016/j.jcrimjus.2019.101655.
- Robbins, S. P., Sanghi, S. (2006). *Organizational Behavior (11th Ed.)*. Delhi: Dorling Kindersley (India) Pvt. Ltd.
- Sari, E., Koul, R., Rochanah, S. & Arum, W., S., A. (2019). How Could Management of School Environment Improve Organizational Citizenship Behaviors for The Environment? (Case Study at Schools for Specifics Purposes). *Journal of Social Studies Education Research*, 10 (2), 46-73.

- Shamir, B & House, R., J. (1993). Toward the Integration of Transformational, Charismatic, and Visionary Theories. *Leadership Theory and Research: Perspectives and Directions*, 81-107. Academic Press.
- Stritch, J., M. & Christensen, R., K. (2014). Going Green in Public Organizations: Linking Organizational Commitment and Public Service Motives to Public Employees' Workplace Eco-Initiatives. *The American Review of Public Administration*. 46 (3). 337-355. DOI:10.1177/0275074014552470.
- Tang, Z. & Amini, M., Y. (2023). Bridging the GAP: Exploring The Nexus Between Green Human Resource Management, Organizational Citizenship Behavior Towards The Environment, Employee Green Commitment, and Environmental Performance in Hotels. *International Journal of Research in Business and Social Science*, 12 (9), 194-210. DOI: 10.20525/ijrbs. v12i9.3021.
- Zientara, P. & Zamojska, A. (2016). Green Organizational Climates and Employee Pro-Environmental Behaviour in The Hotel Industry. *Journal of Sustainable Tourism*, 26 (7), 1142-1159. DOI: 10.1080/09669582.2016.1206554.