

The mediation role of organization citizenship behaviour between employee motivation and productivity: Analysis of Pharmaceutical Industries in KRG

Ferman Ismael¹, Bikhtiyar Hussein², Mustafa Sabah Ibrahim³, Shwana Akoye⁴

¹Aynda Private Technical Institute-KRG, Iraq

²General Directorate of Scientific Research Center, Salahaddin University-KRG, Iraq

^{3,4}Komar university of Science and Technology, Iraq

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Abstract

Organizational Citizenship Behavior (OCB) is a type of behavior that has an impact on the efficiency of an organization. It has far-reaching implications in the workplace. OCB can help organizations become more effective by improving productivity. Employee motivation and citizenship behaviours have become important issues in OB. This study examines the mediation role of organization citizenship behaviour between employee motivation and productivity at pharmaceutical Industries in KRG. The researchers employed quantitative research method via using a survey to measure the current study. The questionnaire was distributed randomly among 150 administrative employees of different pharmaceutical industries in Kurdistan region. However, the researchers were able to gather 139 completed questionnaires. The findings revealed that organization citizenship behaviour has a significant and positive mediation role between motivation factors and productivity at pharmaceutical industries in Kurdistan region of Iraq.

Keywords— Organization Citizenship Behaviour, Employee Motivation, Productivity, Pharmaceutical Industries.

I. INTRODUCTION

As a due to globalisation, organizations are constantly changing in every aspect of their operations. Organizational working procedures are also rapidly changing as a result of technological advancements. There are some active OB practices that can assist in providing solutions to problems that arise as a result of the workplace's constant change. These practices have the potential to be a significant source of organizational success (Supriyanto, et al., 2018). Managing people in the current age group at different work sites in a vibrant and rapidly changing environment is not an easy task. Because some people prefer one dimension of benefits while others prefer a different dimension of benefits, there should be different treatments for different people. OCB that provides strength to the organization in the form of increased employee productivity should be implemented for this purpose (Garg, 2020).

Currently, the importance of managing a firm's resources should be kept in mind for any firm's success. Human resources are crucial and must be taken into account. OCB is a key differentiating factor for many organizations, particularly in the service industry (Priyankara, et al., 2018).

A thorough examination of material in management research reveals that the level of motivation and commitment of employees in the organization has a direct relationship with the organization's productivity. Many factors influence and shape employee motivation in the workplace. OB and the provision of basic needs for employees are two factors that influence and shape employee motivation. When people notice that they are treated equally and fairly at work, they achieve OB. Fairness produces motivation in social exchange, according to well-known psychologists. Because if everything in life is fair, everyone will get what they deserve. Individuals compare their actions to those of others to see if they are being treated fairly. Because OB is a major source of employee motivation, it cannot be taken lightly (Zahavy, 2018).

Researchers and organization behavior (OB) practitioners have been paying more attention to the relationship between organizational citizenship behavior, employee motivation, and productivity. This is a critical issue because employees are frequently regarded as a company's most valuable asset (Dharma, 2018).

In today's job market, finding highly talented and skilled employees has become difficult. As a result, any company that accomplishes this feat gains a competitive advantage over its competitors. This implies that effective management of this resource is a major managerial concern. The OB literature has extensively discussed how organizations manage and retain employees by implementing a variety of OB practices (Budur & Poturak, 2021). Providing extensive training and development opportunities, designing fair job and productivity appraisal processes, developing incentive pay systems, and so on are examples of such practices (Ciobanu, et al., 2019). Despite the fact that these bodies of OB literature provide extensive empirical evidence supporting how organizational citizenship behavior can actualize desired outcomes, it is surprising to note that previous studies frequently appear to ignore how employees' behavioral reactions affect these relationships (Paais & Pattiruhu, 2020). The literature ignores how employees think about and react to OB, making it difficult to understand how these practices lead to desirable outcomes. Employees who anticipate and monitor rapid changes in the business and figure out how to deal with these changes in order to maintain or improve effectiveness are needed by organizations (Curcuruto & Griffin, 2018). As a result, we argue that organizational citizenship behavior (OCB) is involved in the behavioural process of employees to help explain the productivity relationship. Extra efforts that go beyond the scope of core job responsibilities are included in this behavior (e.g., finding out the changes in demand, advocating initiatives to adapt to changing conditions, and exercising a proactive stance toward the efficient implementation of strategic changes). OCB may help to confirm the role that they play in determining the extent to which employees create an intention to leave their current job (Ismael & Yesiltas, 2020).

Employees become a valuable resource for a company. They are a necessary component for the organization to progress and overcome obstacles. Improving employee productivity is one of the challenges that organizations face. Productivity is defined as the efficient and effective use of resources to achieve a set goal (Luu, 2019). The OCB factor has a significant impact on employee and organizational productivity. It motivates practitioners and academics to seek out new construction that will have a significant impact on OCB. The researchers are interested in OCB's ability to improve individual and organizational productivity (Ng, et al., 2021). By improving job productivity and employee productivity, OCB has the potential to improve organizational efficiency (Pham, et al., 2020).

Organization Citizenship Behaviour OCB

The concept of OCB in different sectors has been studied theoretically and empirically for over two decades, and the OCB experiences and outcomes have been analyzed (Wuryani, et al., 2021). OCB is defined as "discretionary behavior that is not directly or explicitly recognized by the formal reward system and that, in aggregate, promotes the organization's effective functioning" (Anwar, et al., 2020). OCB was recently defined in terms of its relationship to performance, as "performance that supports the social and psychological environment in which task performance occurs" (Pham, et al., 2019). The advantages of OCB include the following: first, engaged employees are more likely to receive positive performance ratings from their managers (Pourmola, et al., 2019). This is because engaged employees are liked and regarded more favorably by their bosses (Miao, et al., 2019). Second, there is a link between reward and performance, such as bonuses, pay raises, promotions, or work-related benefits (Beltrán-Martín & Bou-Llugar, 2018). Third, because those who perform well receive higher benefits and rewards, their chances of being laid off are lower than those of other employees in the event of a downsizing due to economic hardship. Based on a review of the literature, developed seven common dimensions. Helping behavior, sportsmanship, organizational loyalty, organizational compliance, individual initiative, civic virtue, and self-development are examples of these dimensions (Hamza, et al., 2021). However, thanks to Organ's OCB, there are some conceptual overlaps between concepts like altruism and courtesy (Hussein & Yesiltas, 2020). The term "contextual performance" is used to describe OCB. It is defined as task-facilitating behavior manifested in psychological and social environment support. This behavior supports task performance in order to benefit the organization (Prabowo, et al., 2018). This behavior is manifested in a conscious and voluntary willingness to work and contribute to the organization (Pancasila et al., 2020). Helping others, volunteering for extra tasks, and following work rules and procedures are all examples of OCB behaviors. Employees' added value is reflected in this behavior, which is one type of prosocial behavior, i.e. positive social, constructive, and meaningful help behavior. OCB is defined as workplace behavior that goes beyond one's job requirements based on one's personal judgment. According to organizational theory, OCB arises as a result of a system of cooperation and people's willingness to contribute and strive for system cooperation, and it has become an absolute requirement in organizations (Hwang & Lee, 2019). Entrepreneur leadership has an effect on OCB. Entrepreneurial leadership, (Subarto, et al., 2021), focused on the desire to introduce and enhance innovative activities. Extra-role

behaviors (OCB) have been linked to proactive and innovative behavior. Employees become more responsible, patient, responsive, and proactive as a result of increasing helpful behavior, positive behavior, volunteering, and participating in supporting organizational functions, according to the findings. The relationship between OCB, Spiritual quotient, and employee performance is based on research that spiritual quotient can organize and guide individual actions in order to improve individual and organizational performance. Rodríguez-Cifuentes, et al., (2020) suggested that in order to understand OCB's role in performance, it should be studied in conjunction with spirituality. In recent years, organizational citizenship behavior (OCB) has become a popular organizational factor in the literature. Organ and colleagues coined the term individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and in the aggregate promotes the efficient and effective functioning of the organization. These actions are not mandated by job descriptions, are not rewarded or punished by management, and are entirely voluntary (Li, et al., 2019). Despite the importance of burnout in terms of organizational performance, there are few studies that look into the link between burnout and OCB. Furthermore, despite the significant relationship between job satisfaction and both burnout and OCB, no research has yet mentioned the mediating role of job satisfaction (Hur, et al., 20187). Discretionary behaviors that promote organizational effectiveness are distinct from formal role behaviors. Prosocial organizational behavior, extrarole behavior, good soldier syndrome, and organizational citizenship behavior are all terms used to describe these informal behaviors. Some social behaviors are included in OCB, such as being sensitive to others' mistakes, discussing problems if necessary, completing work on time, being innovative, assisting others, and acting voluntarily (Shobe, 2018).

Soriano, et al., (2020) reviewed the OCB literature and determined whether the OCB dimensions fit into a five-factor, two-factor, or one-factor model; they concluded that the one-factor model was the best. After reviewing these studies, it is clear that the OCB concept has yet to be fully conceptualized, and the dimensions of the concept have yet to be agreed upon. Despite this ambiguity, the literature is increasingly advocating for merging the dimensions. Within the organizational life, OCB has been linked to employee productivity (Bateman & Organ, 1983), motivation, OB, organizational performance, and productivity. When OCBs are increased, so is organizational achievement; additionally, OCB can improve coworker and managerial productivity, free resources for more productive purposes, serve as an effective means of coordinating activities, and improve the organization's ability to attract and retain the

best people (Kim & Beehr, 2018). When considering the importance of OCB, it's also a good idea to look into the potential interactions between OCB and burnout. According to previous research, a thorough understanding of OCB antecedents must account for the influence of potential contextual moderators and mediators such as motivation, perceived organizational instrumentality, and perceived individual instrumentality, on the relationship between leadership and OCB or other constructs on OCB. Multiple studies have shown that different workforce cultures may have different perspectives on their relationships with OCB (Gawke, et al., 2018).

Employee Motivation

Many researchers and authors have defined motivation as the psychological impetus that controls a person's level of effort as well as their persistence in the face of obstacles in the workplace. It's also described as "a cognitive decision-making process that influences goal-directed behavior persistence and direction" (Deng, et al., 2019). "Work motivation can also be defined as the psychological forces within a person that determine the direction of that person's behavior in an organization," according to another definition. The following are the main components of the definition: effort, direct power, and different routes for behavior and effort. These words translate to the approach people take in order to achieve high levels of performance that will benefit their organizations in the long run. Motivation, as defined by (Budur & Poturak, 2021), is the desire to accomplish something ((smael & Yesiltas, 2020). Thus, motivation occurs when a person is "moved to do something to 3 achieve an end," whereas demotivation or unmotivation occurs when someone should do something but is not moved or inspired to do it. Authors such as (El Masri & Suliman, 2019) emphasize the importance of conducting more research and studies on motivation from a broader perspective in order to better understand the concept of employee behavior in the workplace in the public sector. The literature reveals that there is a difference in motivation between private sector employees and their managers versus public sector employees and their managers. Consider the two types of motivation, intrinsic and extrinsic, for a clear and deep understanding of the context of motivation. According to Wang, et al., (2019), employee engagement in the workplace is a basic need that can be divided into two categories: intrinsic and extrinsic motivation. Intrinsic motivation refers to a person's internal principles for completing a task and meeting work obligations, whereas extrinsic motivation refers to an individual's desire to achieve specific outcomes such as (money or rewards) that are linked to the same duties and tasks (Parke, et al., 2018). The intrinsic concept refers to a person's personal pleasure. To summarize, intrinsic

motivation refers to internal needs, whereas extrinsic motivation refers to external needs that are interpreted by external environments. Within the organization, both approaches and styles of motivation are required to achieve a suitable work environment, as well as on an individual level to achieve employee satisfaction and engagement (Supriyanto, et al., 2020). Employee motivation, satisfaction, retention, and performance can all be improved and sustained with the right mix of practices tailored to the organization's needs (Olugbade & Karatepe, 2019). Reward management, performance appraisal, and promotion practices were identified as three critical areas of employee motivation for high performance. Employees receive rewards in exchange for their efforts, indicating that they and their contributions are valued. These are essential for attracting employees, maintaining motivation, job satisfaction, and staff retention (Rofcanin, et al., 2018). Inadequate rewards lower motivation and performance, increase turnover, and lower organizational performance (AlKahtani, et al., 2021). Performance appraisal is used to determine promotions/demotions, pay raises, retention, transfers, and training and development needs by evaluating employee performance, identifying developmental needs, and assessing contribution to organizational goals (Raza, et al., 2018). It measures employee performance and improves motivation, commitment, and job satisfaction, resulting in better performance and retention (Nguyen, et al., 2019). Promotions can be motivating because they are seen as rewards for good work and provide opportunities for growth and advancement (Haerani, et al., 2020).

Productivity and Organisational Citizenship Behaviour (OCB)

OCB includes "discretionary behavior that is not directly or explicitly recognized by the formal reward system, but in the aggregate promotes the effective functioning of the organization." Importantly, in today's business environment, an individual's behavior is influenced by how they feel about their job, which influences how they conduct themselves (Garg, 2020). There have been five distinct aspects of OCB identified: (a) discretionary behavior; (b) altruism, or assisting others with organizationally relevant tasks or problems; (c) civic virtue, behaving or indicating willingness to participate in the company's life; (d) sportsmanship, behaving or indicating tolerance of less-than-ideal circumstances without complaining; and (e) courtesy, or efforts to prevent work-related problems with others (Supriyanto, et al., 2018). OCBs are silent behaviors that influence individual and productivity, according to current research, and they should be encouraged (Priyankara, et al., 2018). Employee productivity can be measured, for example, and this can have a positive impact on employee behavior because it is seen as contributing to

their professional development and remuneration (Zahavy, 2018). Promotion has the benefit of lowering costs and increasing the affective commitment of promoted employees (Kondratuk et al., 2004). As a result, businesses are more willing to provide programs that manage and develop their talented workforce, and OCBs are displayed in anticipation of rewards or promotions. Employee motivation and organizational citizenship behavior are related. Some studies show that Employee motivation boosts extra-role behavior (Dharma, 2018), while others claim that the relationship between productivity and OCB is based on motivation and social exchange (Budur & Poturak, 2021).

Employees are less likely to engage in civic behavior if they believe their employer has failed to fulfill their employment obligations. Employees are more likely to exhibit OCBs if they believe their employers have treated them fairly. But, in Developing countries, there has been little research on OB and OCB, particularly with employee motivation as a mediator (Ciobanu, et al., 2019). Furthermore, the limited literature available reveals that previous studies' findings are ambiguous. In a high power distance and collectivistic society like developing countries, Paais & Pattiruhu, (2020) claim that there is significant relationship between OB and productivity. In Developing countries, however, only a few studies have looked into the link between OB perceptions, Employee motivation, and OCB in the manufacturing sector. Given the current Developing countries workforce's job-hopping habits, the question of how employee perceptions of OB are related to Employee motivation and OCB remains unanswered (Hussein & Yesiltas, 2020). This research aims to answer that question. Organizational citizenship behavior and organizational OB appears to be a key determinant of OCB, according to numerous studies (Curcuruto & Griffin, 2018). Except for Employee motivation, where Developing countries recorded significantly higher endorsement than expatriates, no significant difference was found between the two groups on perceptions of distributive, procedural, and interactional aspects of OB, as well as organizational commitment and turbulence, according to the findings from a sample of Developing countries nationals with tenure appointments and expatriates with contractual appointments drawn from four public universities in developing countries (Luu, 2019).

Methodology and sample

This research aimed to examine the mediation role of organization citizenship behaviour between motivation factors and productivity at pharmaceutical industries. To enable the study to measure the above-mentioned mediation role, the researchers used four motivation factors, first is

recognition, second is compensation, third is work ethic, and fourth is career growth along with organization citizenship behaviour as a mediator. The researchers employed quantitative research method via using a survey to measure the current study. The questionnaire was distributed randomly among 150 administrative employees of different pharmaceutical industries in Kurdistan region. However, the researchers were able to gather 139 completed

questionnaires. All items in the questionnaire were evaluated by using five point Likert scale ranging from 1=Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree to 5= Strongly Agree. After the completion of data gathering, all data were examined by SPSS to analyse the relationship between motivation factors and productivity along with organization citizenship behaviour as mediator.

Conceptual Framework

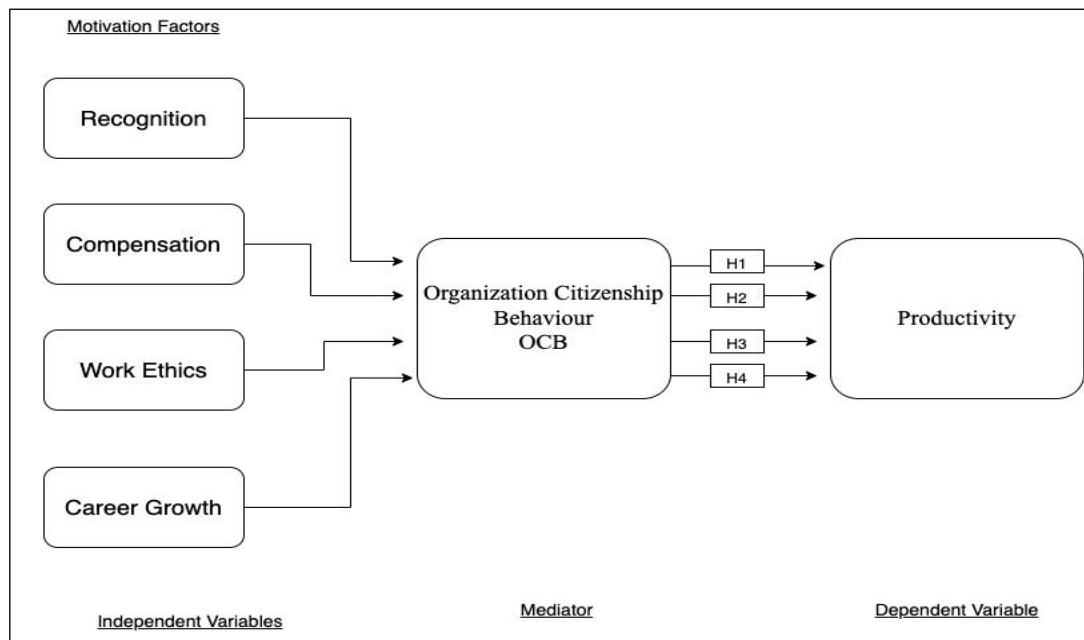


Fig.1- Conceptual framework

Research Hypotheses

H1: Organization citizenship behaviour has a positive and significant mediation role between recognition as a motivation factor and productivity at pharmaceutical industries.

H2: Organization citizenship behaviour has a positive and significant mediation role between compensation as a motivation factor and productivity at pharmaceutical industries.

H3: Organization citizenship behaviour has a positive and significant mediation role between work ethic as a motivation factor and productivity at pharmaceutical industries.

H4: Organization citizenship behaviour has a positive and significant mediation role between career growth as a motivation factor and productivity at pharmaceutical industries.

Table 1- KMO and Bartlett Sphericity Test of Self-rating Items

| Factors | N of items | n | KMO | Bartlett test | |
|---------------|------------|-----|------|---------------|------|
| | | | | Chi-Square | Sig |
| Recognition | 10 | 139 | .702 | 2.147 | .000 |
| Compensation | 9 | 139 | | | |
| Work ethics | 11 | 139 | | | |
| Career growth | 10 | 139 | | | |

As we can see in table (1), the result of KMO for motivation as independent variable (recognition, compensation, work ethics, and career growth as a motivation factors), organization citizenship behaviour as mediator and productivity at pharmaceutical industries as dependent

variable, r ; is .702 which is higher than .001 this indicates that the sample size used for the current study was more than adequate. Furthermore, the result of Chi-Square is 2.147 with the significant level .000.

Table 2: Reliability analysis

| Variables | N of items | n | Cronbach's Alpha |
|------------------------------------|------------|-----|------------------|
| Recognition | 10 | 139 | .712 |
| Compensation | 9 | 139 | .728 |
| Work ethics | 11 | 139 | .711 |
| Career growth | 10 | 139 | .756 |
| Organization citizenship behaviour | 10 | 139 | .739 |
| Productivity | 10 | 139 | .758 |

As seen in table (2), the reliability analysis for 60 items used to measure the influence of motivation factors (recognition, compensation, work ethics, and career growth), organization citizenship behaviour as mediator and productivity at pharmaceutical industries as dependent variable. The above 60 questions were distributed as follow; 10 items for recognition as a motivation factor, 9 items for compensation as a motivation factor, 11 items for work ethics as a motivation factor, 10 items for career growth as a motivation factor, 10 items for organization citizenship behaviour as a mediator, and 10 items for productivity at pharmaceutical industries as a dependent variable. The researchers applied reliability analysis to find out the reliability for each factor, the findings revealed as follow: as for recognition as a motivation factor was found the Alpha to be .712 with the sample size of 139 for 10 questions which indicated that all 10 questions used to measure recognition as a motivation factor were reliable for the current study, as for compensation as a motivation factor was found the Alpha to be .728 with the sample size of 139

for 9 questions which indicated that all 9 questions used to measure compensation as a motivation factor were reliable for the current study, as for work ethics as a motivation factor was found the Alpha to be .711 with the sample size of 139 for 11 questions which indicated that all 11 questions used to measure work ethics as a motivation factor were reliable for the current study, as for career growth as a motivation factor was found the Alpha to be .756 the sample size of 139 for 10 questions which indicated that all 10 questions used to measure career growth as a motivation factor were reliable for the current study, as for organization citizenship behaviour as a mediator was found the Alpha to be .739 the sample size of 139 for 10 questions which indicated that all 10 questions used to measure organization citizenship behaviour as a mediator were reliable for the current study, and as for Productivity as a dependent variable was found the Alpha to be .758 the sample size of 139 for 10 questions which indicated that all 10 questions used to measure Productivity as a dependent variable were reliable for the current study.

Table 3: Correlation Analysis

| Items | | Recognition | Compensation | Work ethic | Career growth | Productivity |
|--------------|---------------------|-------------|--------------|------------|---------------|--------------|
| Recognition | Pearson Correlation | 1 | | | | |
| | Sig. (2tailed) | | | | | |
| | N | 139 | | | | |
| Compensation | Pearson Correlation | .522** | 1 | | | |
| | Sig. (2tailed) | .000 | | | | |
| | N | 139 | 139 | | | |

| | | | | | | |
|---------------|---------------------|--------|--------|--------|--------|--------|
| Work ethic | Pearson Correlation | .578** | .598** | 1 | | |
| | Sig. (2tailed) | .000 | .000 | | | |
| | N | 139 | 139 | 139 | | |
| Career growth | Pearson Correlation | .602** | .603** | .614** | 1 | |
| | Sig. (2tailed) | .000 | .001 | .000 | | |
| | N | 139 | 139 | 139 | 139 | |
| Productivity | Pearson Correlation | .511** | .631** | .642** | .517** | .671** |
| | Sig. (2tailed) | .000 | .001 | .000 | | |
| | N | 139 | 139 | 139 | 139 | 139 |

** Correlation is significant at the 0.01 level (2-tailed).

As it can be seen in table (3), the finding revealed that the value of Pearson correlation ($r = .511^{**}$, $p < 0.01$), between recognition as a motivation factor this indicated that there is positive and strong correlation between recognition as a motivation factor and productivity at pharmaceutical industries, the value of Pearson correlation ($r = .631^{**}$, $p < 0.01$), between compensation as a motivation factor this indicated that there is positive and strong correlation between compensation as a motivation factor and productivity at pharmaceutical industries, the value of Pearson correlation ($r = .642^{**}$, $p < 0.01$), between work ethics as a motivation factor this indicated that there is positive and strong correlation between work ethics as a motivation factor and productivity at pharmaceutical industries, the value of Pearson correlation ($r = .517^{**}$,

$p < 0.01$), between career growth as a motivation factor this indicated that there is positive and strong correlation between work ethics as a motivation factor and productivity at pharmaceutical industries, and the value of Pearson correlation ($r = .671^{**}$, $p < 0.01$), between organization citizenship behaviour as mediator this indicated that there is positive and strong correlation between organization citizenship behaviour as mediator and productivity at pharmaceutical industries.

Testing first research hypothesis

H1: Organization citizenship behaviour has a positive and significant mediation role between recognition as a motivation factor and productivity at pharmaceutical industries.

Table 4-Hierarchal Multiple Regression

| Coefficients | | | | | | |
|--------------|------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.117 | .2002 | | 3.561 | .000 |
| | Recognition | .594 | .035 | .601 | 2.635 | .000 |
| 2 | (Constant) | 1.311 | .141 | | 2.145 | .000 |
| | Recognition | .602 | .071 | .608 | 1.008 | .000 |
| | Organization Citizenship Behaviour | .671 | .035 | .677 | 1.365 | .000 |

a. Dependent Variable: Productivity

Table (4), demonstrates a hierarchal multiple regression analysis to investigate first research hypothesis which stated that Organization citizenship behaviour mediates recognition as a motivation factor with productivity at pharmaceutical industries. Concerning model (1) the direct relationship between recognition and productivity, the value of $B = .594$, the value of $Beta = .601$ with $P\text{-value} = .000$ this indicated that there is a significant and positive relationship between recognition and productivity. As for model (2) which applied multiple regression analysis to find both recognition as independent factor and organization citizenship behaviour as a mediator factor with productivity at pharmaceutical industries as dependent

factor, the findings showed that the value of $B = .602$, the value of $Beta = .608$ with $P\text{-value} = .001$ as indirect relationship between recognition and productivity, on the other hand, the value of $B = .671$, the value of $Beta = .677$ with $P\text{-value} = .000$ as mediation between organization citizenship behaviour and productivity. The findings proved that there is a positive and significant direct and indirect relationship between recognition and productivity at pharmaceutical industries, moreover organization citizenship behaviour has a positive and significant mediating role between recognition and productivity at pharmaceutical industries.

Table 5: Sobel Test

| Input: | | Test statistic: | | Std. Error: | p-value: |
|----------------|------|-----------------|------------|-------------|----------|
| a | .602 | Sobel test: | 3.89087704 | 0.10381772 | 0.0000 |
| b | .671 | Aroian test: | 3.87291261 | 0.10429928 | 0.00001 |
| s _a | .141 | Goodman test: | 3.9090938 | 0.10333392 | 0.00000 |
| s _b | .071 | Reset all | Calculate | | |

P-value is significant at level 0.005

Table (5), illustrates the finding of Sobel test to find the mediation analysis, the result demonstrates the direct relationship between recognition and productivity, $P\text{-value} = .0000$ this indicated that there is a significant and positive direct relationship between recognition and productivity. Furthermore, $P\text{-value}$ is .000 as indirect relationship between recognition and productivity. Moreover, the results proved that there is a positive and significant direct and indirect relationship between recognition and

productivity, moreover organization citizenship behaviour has a positive and significant mediating role between recognition and productivity at pharmaceutical industries.

Testing second research hypothesis

H2: Organization citizenship behaviour has a positive and significant mediation role between compensation as a motivation factor and productivity at pharmaceutical industries.

Table 6: Hierarchal Multiple Regression

| Coefficients | | | | | | |
|-------------------------------------|------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.336 | .101 | | 2.521 | .000 |
| | Compensation | .539 | .032 | .542 | 2.365 | .000 |
| 2 | (Constant) | 1.331 | .127 | | 2.314 | .000 |
| | Compensation | .617 | .013 | .621 | 1.365 | .000 |
| | Organization Citizenship Behaviour | .632 | .029 | .637 | 1.339 | .000 |
| a. Dependent Variable: Productivity | | | | | | |

Table (6), demonstrates a hierarchal multiple regression analysis to investigate second research hypothesis which stated that Organization citizenship behaviour mediates compensationas with productivity at pharmaceutical industries. Concerning model (1) the direct relationship between compensation and productivity, the value of B = .539, the value of Beta = .542 with P-value =.000 this indicated that there is a significant and positive relationship between compensation and productivity. As for model (2) which applied multiple regression analysis to find both compensationas a motivation factor as independent factor and Organization citizenship behaviour as a mediator factor with productivity at pharmaceutical industries as dependent

factor, the findings showed that the value of B =.617, the value of Beta = .621 with P-value .001 as indirect relationship between Compensation and productivity, on the other hand, the value of B =.632, the value of Beta = .637 with Pvalue .000 as mediation between Organization citizenship behaviour and productivity. The findings proved that there is a positive and significant direct and indirect relationship between compensation as a motivation factor and productivity at pharmaceutical industries, moreover organization citizenship behaviour has a positive and significant mediating role between Compensation and productivity at pharmaceutical industries.

Table 7: Sobel Test

| Input: | | Test statistic: | | Std. Error: | p-value: |
|----------------|------|-----------------|-------------|-------------|----------|
| a | .617 | Sobel test: | 19.80503287 | 0.01968914 | 0.000 |
| b | .632 | Aroian test: | 19.8014033 | 0.01969275 | 0.000 |
| s _a | .013 | Goodman test: | 19.80866444 | 0.01968553 | 0.000 |
| s _b | .029 | Reset all | Calculate | | |

P-value is significant at level 0.005

Table (7), illustrates the finding of Sobel test to find the mediation analysis, the result demonstrates the direct relationship between compensation and productivity at pharmaceutical industries, P-value =.000 this indicated that there is a significant and positive direct relationship between compensation and productivity. Furthermore, P-value is .000 as indirect relationship between compensation and productivity. Moreover, the results proved that there is a positive and significant direct and indirect relationship between compensation and productivity, moreover

organization citizenship behaviour has a positive and significant mediating role between compensation and productivity.

Testing third research hypothesis

H3: Organization citizenship behaviour has a positive and significant mediation role between work ethic as a motivation factor and productivity at pharmaceutical industries.

Table 8: Hierarchal Multiple Regression

| Coefficients | | | | | | |
|-------------------------------------|------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.339 | .3214 | | 4.002 | .000 |
| | Work ethics | .498 | .034 | .502 | 2.363 | .000 |
| 2 | (Constant) | 1.933 | .121 | | 1.854 | .000 |
| | Work ethics | .503 | .027 | .511 | 1.331 | .000 |
| | Organization Citizenship Behaviour | .597 | .071 | .603 | 1.631 | .000 |
| a. Dependent Variable: Productivity | | | | | | |

Table (8), demonstrates a hierarchal multiple regression analysis to investigate third research hypothesis which stated that organization citizenship behaviour mediates work ethics with productivity at pharmaceutical industries. Concerning model (1) the direct relationship between work ethics and productivity, the value of B = .498, the value of Beta = .502 with P-value =.000 this indicated that there is a significant and positive relationship between work ethics and productivity. As for model (2) which applied multiple regression analysis to find both work ethics as independent factor and organization citizenship behaviour as a mediator factor with productivity as dependent factor, the findings

showed that the value of B =.503, the value of Beta = .511 with P-value .001 as indirect relationship between work ethics and productivity, on the other hand, the value of B =.597, the value of Beta = .603 with P-value .000 as mediation between organization citizenship behaviour and productivity at pharmaceutical industries. The finding proved that there is a positive and significant direct and indirect relationship between work ethics and productivity, moreover organization citizenship behaviour has a positive and significant mediating role between work ethics and productivity.

Table 9: Sobel Test

| Input: | | Test statistic: | Std. Error: | p-value: |
|----------------|------|-------------------------|-------------|----------|
| a | .503 | Sobel test: 7.66397541 | 0.03918215 | 0.000 |
| b | .597 | Aroian test: 7.65481926 | 0.03922901 | 0.000 |
| s _a | .027 | Goodman test: 7.6731645 | 0.03913522 | 0.000 |
| s _b | .071 | Reset all | Calculate | |

P-value is significant at level 0.005

Table (9), illustrates the finding of Sobel test to find the mediation analysis, the result demonstrates the direct relationship between work ethics and productivity, P-value =.000 this indicated that there is a significant and positive direct relationship between work ethics and productivity. Furthermore, P-value is .000 as indirect relationship between work ethics and productivity. Moreover, the results proved that there is a positive and significant direct and indirect relationship between work ethics and

productivity, moreover organization citizenship behaviour has a positive and significant mediating role between work ethics and productivity at pharmaceutical industries.

Testing fourth research hypothesis

H4: Organization citizenship behaviour has a positive and significant mediation role between career growth as a motivation factor and productivity at pharmaceutical industries.

Table 10: Hierarchal Multiple Regression

| Coefficients | | | | | | |
|--------------|------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 1.744 | .1121 | | 1.221 | .000 |
| | Career growth | .464 | .072 | .471 | 1.633 | .000 |
| 2 | (Constant) | 1.033 | .112 | | 1.528 | .000 |
| | Career growth | .481 | .017 | .486 | 1.323 | .000 |
| | Organization Citizenship Behaviour | .609 | .052 | .612 | 1.332 | .000 |

a. Dependent Variable: Productivity

Table (10), demonstrates a hierarchical multiple regression analysis to investigate fourth research hypothesis which stated that organization citizenship behaviour mediates the relationship between career growth with productivity at pharmaceutical industries. Concerning model (1) the direct relationship between career growth and productivity, the value of $B = .464$, the value of $Beta = .471$ with $P\text{-value} = .000$ this indicated that there is a significant and positive relationship between career growth and productivity. As for model (2) which applied multiple regression analysis to find both career growth as independent factor and organization citizenship behaviour as a mediator factor with productivity as dependent factor, the findings showed

that the value of $B = .481$, the value of $Beta = .486$ with $P\text{-value} .001$ as indirect relationship between career growth and productivity, on the other hand, the value of $B = .609$, the value of $Beta = .612$ with $P\text{-value} .000$ as mediation between organization citizenship behaviour between career growth and productivity. The findings proved that there is a positive and significant direct and indirect relationship between career growth and productivity, moreover organization citizenship behaviour has a positive and significant mediating role between career growth a motivation factor and productivity at pharmaceutical industries.

Table 11: Sobel Test

| Input: | | Test statistic: | | Std. Error: | p-value: |
|--------|------|-----------------|-------------|-------------|----------|
| a | .481 | Sobel test: | 10.82116843 | 0.02707 | 0.000 |
| b | .609 | Aroian test: | 10.81540309 | 0.02708443 | 0.000 |
| s_a | .017 | Goodman test: | 10.826943 | 0.02705556 | 0.000 |
| s_b | .052 | Reset all | Calculate | | |

P-value is significant at level 0.005

Table (11), illustrates the findings of Sobel test to find the mediation analysis, the result demonstrates the direct relationship between career growth and productivity, $P\text{-value} = .000$ this indicated that there is a significant and positive direct relationship between career growth and productivity. Furthermore, $P\text{-value}$ is $.000$ as indirect relationship between career growth and productivity. Moreover, the results proved that there is a positive and significant direct and indirect relationship between career growth and productivity industries, moreover organization citizenship behaviour has a positive and significant mediating role between career growth as a motivation factor and productivity at pharmaceutical industries.

II. CONCLUSION

The concept of employee motivation is considered as an encouraging employee attitude towards the organisation and its vision. Impeding motivation among employees facilitated with engagement can create, develop and increase OCB.

OCB mediates the relationship between motivation factors and productivity at pharmaceutical industries in Kurdistan region. It is manifested helpful behavior, positive behavior, showing effective productivity above minimum standards, voluntarily participates in supporting organizational

functions, motivating employees and responsive and proactive that ultimately will improve productivity.

This study presented an integrated analysis of the OB-OCB relationship by including organization citizenship behaviour as a mediator to provide a wholesome perspective of the associations between motivation factors and productivity. The study has expounded on the importance of employee motivation in the OB-OCB relationship, and therefore, the correlation between these constructs must not be overlooked. Organizations would have to improve OB in tandem with effective motivation approaches to enhance OCB. Motivation and OCB are related to each other. If the employee is motivated, engaged the percentage is possible showing high OCB level. The study shows that OCB is mediating the employee motivation and productivity relationship. This study respondent came from a specific group in the pharmaceutical industries in Kurdistan, those who are have a high level of qualification.

REFERENCES

- [1] AlKahtani, N., Iqbal, S., Sohail, M., Sheraz, F., Jahan, S., Anwar, B., & Haider, S. (2021). Impact of employee empowerment on organizational commitment through job satisfaction in four and five stars hotel industry. *Management Science Letters*, 11(3), 813-822.

- [2] Anwar, N., Mahmood, N. H. N., Yusliza, M. Y., Ramayah, T., Faezah, J. N., & Khalid, W. (2020). Green Human Resource Management for organisational citizenship behaviour towards the environment and environmental performance on a university campus. *Journal of Cleaner Production*, 256, 120401.
- [3] Beltrán-Martín, I., & Bou-Llusar, J. C. (2018). Examining the intermediate role of employee abilities, motivation and opportunities to participate in the relationship between HR bundles and employee performance. *BRQ Business Research Quarterly*, 21(2), 99-110.
- [4] Budur, T., & Poturak, M. (2021). Employee performance and customer loyalty: Mediation effect of customer satisfaction. *Middle East Journal of Management*, 8(5), 453-474.
- [5] Budur, T., & Poturak, M. (2021). Transformational leadership and its impact on customer satisfaction. Measuring mediating effects of organisational citizenship behaviours. *Middle East Journal of Management*, 8(1), 67-91.
- [6] Ciobanu, A., Androniceanu, A., & Lazaroiu, G. (2019). An integrated psycho-sociological perspective on public employees' motivation and performance. *Frontiers in Psychology*, 10, 36.
- [7] Curcuruto, M., & Griffin, M. A. (2018). Prosocial and proactive "safety citizenship behaviour"(SCB): The mediating role of affective commitment and psychological ownership. *Safety science*, 104, 29-38.
- [8] Deng, J., Guo, Y., Ma, T., Yang, T., & Tian, X. (2019). How job stress influences job performance among Chinese healthcare workers: a cross-sectional study. *Environmental health and preventive medicine*, 24(1), 1-11.
- [9] Dharma, Y. (2018). The effect of work motivation on the employee performance with organization citizenship behavior as intervening variable at Bank Aceh Syariah. In *Proceedings of MICoMS 2017*. Emerald Publishing Limited.
- [10] El Masri, N., & Suliman, A. (2019). Talent management, employee recognition and performance in the research institutions. *Studies in Business and Economics*, 14(1), 127-140.
- [11] Garg, N. (2020). Promoting organizational performance in Indian insurance industry: The roles of workplace spirituality and organizational citizenship behaviour. *Global Business Review*, 21(3), 834-849.
- [12] Gawke, J. C., Gorgievski, M. J., & Bakker, A. B. (2018). Personal costs and benefits of employee intrapreneurship: Disentangling the employee intrapreneurship, well-being, and job performance relationship. *Journal of occupational health psychology*, 23(4), 508.
- [13] Haerani, S., Sumardi, S., Hakim, W., Hartini, H., & Putra, A. H. P. K. (2020). Structural model of developing human resources performance: Empirical study of Indonesia states owned enterprises. *The Journal of Asian Finance, Economics, and Business*, 7(3), 211-221.
- [14] Hamza, P. A., Othman, B. J., Gardi, B., Sorguli, S., Aziz, H. M., Ahmed, S. A., ... & Anwar, G. (2021). Recruitment and Selection: The Relationship between Recruitment and Selection with Organizational Performance. *International Journal of Engineering, Business and Management*, 5(3), 1-13.
- [15] Hur, W. M., Kim, H., & Kim, H. K. (2018). Does customer engagement in corporate social responsibility initiatives lead to customer citizenship behaviour? The mediating roles of customer-company identification and affective commitment. *Corporate Social Responsibility and Environmental Management*, 25(6), 1258-1269.
- [16] Hussein, B., & Yesiltas, M. (2020). The influence of emotional intelligence on employee's counterwork behavior and organizational commitment: mediating role of transformational leadership. *Revista de Cercetare si Interventie Sociala*, 71, 377.
- [17] Hwang, K., & Lee, B. (2019). Pride, mindfulness, public self-awareness, affective satisfaction, and customer citizenship behaviour among green restaurant customers. *International Journal of Hospitality Management*, 83, 169-179.
- [18] Ismael, F., & Yesiltas, M. (2020). Sustainability of CSR on Organizational Citizenship Behavior, Work Engagement and Job Satisfaction: Evidence from Iraq. *Revista de Cercetare si Interventie Sociala*, 71.
- [19] Kim, M., & Beehr, T. A. (2018). Challenge and hindrance demands lead to employees' health and behaviours through intrinsic motivation. *Stress and Health*, 34(3), 367-378.
- [20] Li, C., Naz, S., Khan, M. A. S., Kusi, B., & Murad, M. (2019). An empirical investigation on the relationship between a high-performance work system and employee performance: measuring a mediation model through partial least squares-structural equation modeling. *Psychology research and behavior management*, 12, 397.
- [21] Luu, T. T. (2019). Service-oriented high-performance work systems and service-oriented behaviours in public organizations: the mediating role of work engagement. *Public Management Review*, 21(6), 789-816.
- [22] Miao, Q., Eva, N., Newman, A., & Schwarz, G. (2019). Public service motivation and performance: The role of organizational identification. *Public Money & Management*, 39(2), 77-85.
- [23] Ng, L. P., Choong, Y. O., Kuar, L. S., Tan, C. E., & Teoh, S. Y. (2021). Job satisfaction and organizational citizenship behaviour amongst health professionals: The mediating role of work engagement. *International Journal of Healthcare Management*, 14(3), 797-804.
- [24] Nguyen, H. M., Mai, L. T., & Huynh, T. L. (2019). The role of transformational leadership toward work performance through intrinsic motivation: A study in the pharmaceutical field in vietnam. *The Journal of Asian Finance, Economics, and Business*, 6(4), 201-212.
- [25] Olugbade, O. A., & Karatepe, O. M. (2019). Stressors, work engagement and their effects on hotel employee outcomes. *The Service Industries Journal*, 39(3-4), 279-298.
- [26] Paais, M., & PATTIRUHU, J. R. (2020). Effect of motivation, leadership, and organizational culture on satisfaction and employee performance. *The Journal of Asian Finance, Economics, and Business*, 7(8), 577-588.
- [27] Pancasila, I., Haryono, S., & Sulistyono, B. A. (2020). Effects of work motivation and leadership toward work satisfaction

- and employee performance: Evidence from Indonesia. *The Journal of Asian Finance, Economics, and Business*, 7(6), 387-397.
- [28] Parke, M. R., Weinhardt, J. M., Brodsky, A., Tangirala, S., & DeVoe, S. E. (2018). When daily planning improves employee performance: The importance of planning type, engagement, and interruptions. *Journal of Applied Psychology*, 103(3), 300.
- [29] Pham, N. T., Thanh, T. V., Tučková, Z., & Thuy, V. T. N. (2020). The role of green human resource management in driving hotel's environmental performance: Interaction and mediation analysis. *International Journal of Hospitality Management*, 88, 102392.
- [30] Pham, N. T., Tučková, Z., & Jabbour, C. J. C. (2019). Greening the hospitality industry: How do green human resource management practices influence organizational citizenship behavior in hotels? A mixed-methods study. *Tourism Management*, 72, 386-399.
- [31] Pourmola, M., Bagheri, M., Alinezhad, P., & Nejad, P. (2019). Investigating the impact of organizational spirituality on human resources productivity in manufacturing organizations. *Management Science Letters*, 9(1), 121-132.
- [32] Prabowo, T. S., Noermijati, N., & Irawanto, D. W. (2018). The influence of transformational leadership and work motivation on employee performance mediated by job satisfaction. *Jurnal Aplikasi Manajemen*, 16(1), 171-178.
- [33] Priyankara, H. P. R., Luo, F., Saeed, A., Nubuor, S. A., & Jayasuriya, M. P. F. (2018). How does leader's support for environment promote organizational citizenship behaviour for environment? A multi-theory perspective. *Sustainability*, 10(1), 271.
- [34] Raza, B., Ali, M., Ahmed, S., & Ahmad, J. (2018). Impact of managerial coaching on organizational citizenship behavior: The mediation and moderation model. *International Journal of Organizational Leadership*, 7, 27-46.
- [35] Rodríguez-Cifuentes, F., Segura-Camacho, A., García-Ael, C., & Topa, G. (2020). The mediating role of psychological capital between motivational orientations and their organizational consequences. *International Journal of Environmental Research and Public Health*, 17(13), 4864.
- [36] Rofcanin, Y., de Jong, J. P., Las Heras, M., & Kim, S. (2018). The moderating role of prosocial motivation on the association between family-supportive supervisor behaviours and employee outcomes. *Journal of vocational behavior*, 107, 153-167.
- [37] Shobe, K. (2018). Productivity driven by job satisfaction, physical work environment, management support and job autonomy. *Business and Economics Journal*, 9(2), 1-9.
- [38] Soriano, A., W. Kozusznik, M., Peiró, J. M., & Mateo, C. (2020). The role of employees' work patterns and office type fit (and misfit) in the relationships between employee well-being and performance. *Environment and Behavior*, 52(2), 111-138.
- [39] Subarto, S., Solihin, D., & Qurbani, D. (2021). Determinants of Job Satisfaction and Its Implications for the Lecturers Performance. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPED)*, 9(2), 163-178.
- [40] Supriyanto, A. S., Ekowati, V. M., Wekke, I. S., & Idris, I. (2018). Respective contribution of entrepreneurial leadership through organizational citizenship behaviour in creating employees performance. *Academy of Entrepreneurship Journal*, 24(4).
- [41] Supriyanto, A., Ekowati, V., & Maghfuroh, U. (2020). Do organizational citizenship behavior and work satisfaction mediate the relationship between spiritual leadership and employee performance?. *Management Science Letters*, 10(5), 1107-1114.
- [42] Wang, M., Guo, T., Ni, Y., Shang, S., & Tang, Z. (2019). The effect of spiritual leadership on employee effectiveness: An intrinsic motivation perspective. *Frontiers in psychology*, 9, 2627.
- [43] Wuryani, E., Rodlib, A., Sutarsib, S., Dewib, N., & Arifb, D. (2021). Analysis of decision support system on situational leadership styles on work motivation and employee performance. *Management Science Letters*, 11(2), 365-372.
- [44] Zahavy, A. (2018). Organizational citizenship behaviour and employee's strain: Examining the buffering effects of leader support an... *American Journal of Theoretical and Applied Business*, 4(1), 15-26.