EXAMINING THE ROLE OF ORGANIZATIONAL BEHAVIOR AND LEADERSHIP STYLES TOWARDS EMPLOYEES’ PERFORMANCE IN PETROCHEMICAL COMPANIES IN SAUDI ARABIA

Abdulhameed A. Almajed, Nadia A. Abdelmegeed Abdelwahed, Musaddag Elrayah, Mohamed A. Moustafa, Jehad Abdallah Atieh Afaneh

ABSTRACT

Objective: The objective of this study was to examine the role of organizational behavior (OB) and leadership styles towards Employees Performance (EP) in petrochemical companies in Saudi Arabia.

Method: This study is quantitative and applied an online approach using Google Forms to gather the information from the respondents. The study utilized 165 valid responses to conclude the investigation. Using multiple regression analysis, the study highlights the influence of Organizational Behavior (OB), Democratic Leadership Style (DLS), and Bureaucratic Leadership Styles (BLS) on Employees Performance (EP).

Results: The findings showed that OB has positively affected the EP. Three out of five hypotheses (two independent variables and one mediator variable) were statistically significant: OB (T=-3.678, p<0.001, β=-0.240), DLS (T= 5.604, p<0.001, β=0.383), and BLS (T= 2.979, p=0.003, β= 0.195) in EP. ALS, on the other hand, was not statistically significant in EP (T =0.922, p=0.358, and β=0.063). Also, LLS was not statistically significant in EP (T=1.427, p=0.155, and β= 0.099).

Conclusions: The findings suggest specific ways to enhance the leadership and EP of supervisors. It indicated that increased EP would result from a DLS and BLS. Leaders or supervisors should be aware of what is crucial for their teams and businesses and inspire their team members to view possibilities and problems in new ways. Supervisors should also have their own goals and strategies for helping subordinates grow as team players and collaborative workers. Supervisors should be innovative and inspire associates to look for more options and possibilities rather than settling for performance that meets standards. Supervisors should be aware of the values of their employees and develop business strategies, plans, procedures, and practices for their department or unit that will likely enhance employees' well-being. Respect for people is essential to developing a good working relationship between managers and staff.
Keywords: organizational behavior, leadership styles, employees, performance, petrochemical.

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EXAMINANDO O PAPEL DO COMPORTAMENTO ORGANIZACIONAL E DOS ESTILOS DE LIDERANÇA NO DESEMPENHO DOS FUNCIONÁRIOS EM EMPRESAS PETROQUÍMICAS NA ARÁBIA SAUDITA

RESUMO

Objetivo: O objetivo deste estudo foi examinar o papel do comportamento organizacional (OB) e os estilos de liderança em relação ao desempenho dos funcionários (EP) em empresas petroquímicas da Arábia Saudita.

Método: Este estudo é quantitativo e aplicou uma abordagem on-line usando o Google. Formulários para recolher as informações dos inquiridos. O estudo utilizou 165 respostas válidas para conclusar a investigação. Usando análise de regressão múltipla, o estudo destaca a influência do Comportamento Organizacional (OB), Estilo de Liderança Democrática (DLS) e Estilos de Liderança Burocrática (BLS) no Desempenho dos Funcionários (EP).

Resultados: As constatações mostraram que o OB afetou positivamente o PE. Três de cinco hipóteses (duas variáveis independentes e uma variável mediadora) foram estatisticamente significantes: OB (T=-3,678, p<0,001, B=-0,240), DLS (T= 5,604, p<0,001, B=0.383) e BLS (T=2,979, p=0,003, B= 0,195) no EP. A ELA, por outro lado, não foi estaticamente significante na EP (T =0,922, p=0,358 e B=0.063). Além disso, a LLS não foi estatisticamente significante na EP (T=1,427, p=0,155 e B= 0,099).

Conclusões: As conclusões sugerem formas específicas de reforçar a liderança e a participação do PE nas autoridades de supervisão. Indicou que o EP aumentado resultaria de um DLS e BLS. Líderes ou supervisores devem estar cientes do que é crucial para suas equipes e negócios e inspirar seus membros de equipe a ver possibilidades e problemas de novas maneiras. Os supervisores também devem ter seus próprios objetivos e estratégias para ajudar os subordinados a crescer à medida que os jogadores da equipe e os trabalhadores colaborativos. Os supervisores devem ser inovadores e inspirar os associados a buscar mais opções e possibilidades em vez de se contentar com um desempenho que atenda aos padrões. Os supervisores devem estar cientes dos valores de seus funcionários e desenvolver estratégias de negócios, planos, procedimentos e práticas para seu departamento ou unidade que provavelmente melhorarão o bem-estar dos funcionários. O respeito pelas pessoas é essencial para desenvolver uma boa relação de trabalho entre os gestores e o pessoal.

Palavras-chave: comportamento organizacional, estilos de liderança, funcionários, desempenho, petroquímica.

1 INTRODUCTION

In the present time, increasing corporate workplace practices enhance opportunities for employees in all business sectors and industries to work effectively, but there is still a big gap in the research when it comes to factors which increase employee
performance (EP) (Xia et al., 2018; Soomro and Shah, 2019; Mehreen and Ali, 2022; Abdelwahed et al., 2023). It can be observed that organizational behaviour (OB) and its influence on employee morale and performance are abundant in the literature. Some of the leading factors also tend to disturb or promote the performance of an individual in any organization (Soomro et al., 2021; Alrwili, 2022).

The same problem with employee productivity and EP in the petrochemical companies of the Kingdom of Saudi Arabia (KSA) has been observed, which must be redeemed. The OB and workplace facilities at the petrochemical companies of the KSA are effective and according to international standards. Research focuses on the problem using a different angle with leadership and its impact on EP (Albejaidi, 2020). Over time, Saudi Arabia's public supplier district has undergone many changes, focusing on developing execution and adequacy and finding outstanding associations fresh in the memory.

In achieving this, the overall improvement plan is built entirely on a chain of five-year plans. Innovators in the environmental aspects of artworks in Saudi Arabia should identify with paternalistic and pioneering administrative paradigms to illuminate the motivating stage they represent. The initiative style played a fundamental role in the work of the Saudi Public Association's hierarchical exhibitions (Rehman et al., 2022). Leader survivability ensures that the execution of layered goals aligns with a creative and visionary mission.

At the same time, the atmosphere for discussions between employees and managers is crucial to achieving goals and having fun at the party. Signs of disappointment among experts within the administration are the primary way to sort out the viability of pioneers, especially through a mindset and teacher perspective based absolutely on a few rules: the extent to which pioneers gather their followers' hopes and needs, the risk of explosion.

Abilities optimal lifestyle and capacity of devotees, ability to make commitments to supporters' mental models, followers' perceptions and appreciation of their leaders, goals related to the sincerity of the pioneers, readiness, and commitment to fulfil the requests of the pioneers, faceless, withdrawing work, complaining, calming, and attacking equipment (Cakir and Adiguzel, 2020). Basically, there are as many definitions of leadership as people who have tried to explain it. A thorough analysis of the many reports of leadership reveals that character is the immediate context.
There is some flexibility concerning contemporary issues generally. Following are a few examples of leadership definitions: Yukl (2006) defined leadership as the process of supporting individual and collective efforts to accomplish a common objective or goal and convincing followers to understand and concur on what has to be done and how it should be performed. The definition discusses immediate and long-term effects but leaves out whether the procedure or goal was successful. Furthermore, Memon (2014) emphasizes that having charge of the company's direction, what others think the future will look like, and how to get there is how leaders are able to affect others' behaviours, beliefs, and attitudes. Kumar and Bhatti (2020) states that "leadership is defined as a process when one impacts others to achieve a goal and lead the organization in a method that changes it to more cohesive and coherent". You may put your leadership traits, such as principles, beliefs, character, knowledge, ethics, and abilities, into practice.

Leadership is a widespread practice that typically calls for responsibility, authority, and the delegation of power, according to Saleem (2015). A leader's primary responsibility is leading, directing, and inspiring followers to accomplish their own and the group's goals and objectives. Gorondutse et al. (2018) suggest that team members research to explore the impacts of leadership styles on the overall EP of the business in Saudi Arabia. Leadership styles matter for achieving customer and employee satisfaction and improving the efficiency of the business structure (Alkassabi et al., 2018).

The researchers used three different methods to investigate the research process, resulting in passive-avoidant and transactional leadership styles that are ineffective in ensuring employee job satisfaction. They also resulted from Petrochemical Company employees facing higher levels of job satisfaction than the employees of the government sector (Alshuwairekh, 2016; Idris and Manganaro, 2017).

Transactional and transformational leadership styles have resulted positively towards employee job satisfaction, while the passive-avoidant style harms job satisfaction. Transformational leadership is more effective in improving efficiency and achieving employee job satisfaction (Alshahrani and Baig, 2016; Abdelhafiz et al., 2016; Abolnasser et al., 2023). Realizing the importance of these factors, the researchers developed the questions to explore among the employees of petrochemical companies in Saudi Arabia:

*What is the role of OB in developing EP?*

*How do leadership styles (ALS, LLS, DLS and BLS) affect EP?*
The paper's organization includes, apart from the introduction, literature review and conceptualization, hypotheses development, methods, analysis, discussion and conclusion, the study's contribution, limitations and future research.

2 LITERATURE REVIEW

2.1 ORGANIZATIONAL BEHAVIOR (OB)

OB has a good reputation in organizations as it enhances performance and satisfaction. OB is the use of understanding how individuals behave inside organizations. It serves as a tool for human use. It widely pertains to how individuals behave in many settings, including corporations, the government, and educational institutions. It facilitates the integration of people, structure, technology, and the surrounding environment into an efficient operational system (Davis, 1968).

Individuals' behaviour can affect a variety of organizational functions, including leader transition and EP. As a result, OB is the main area of concentration for change agents, HR experts, and other people who wish to accelerate organizational transformation (Jiang et al., 2023). Wang et al. (2023) suggest the organizational factors influencing EP. According to Danish et al. (2013), the environment of a specific organization where its personnel perform their jobs is connected to the work environment. Employees may be drawn to a supportive and secure work environment because their requirements will likely be met.

2.2 LEADERSHIP STYLES

Leadership styles refers to a leader's behaviour towards subordinates, frequently spurs or even forces them to accomplish a specific goal. According to Podsakoff et al. (1990), a leader's actions can influence how well-liked and trusted their team members are. Organizational citizenship behaviour further strengthens the association between leadership style and organizational commitment. Supriyanto, A., Ekowati, V., Rokhman, W., Ahamed, F., Munir, M., & Miranti, T. (2023) stated that leadership has a direct impact on organisational behavior like innovation.

As stated by Hamour, H. M. J. A. (2023), every leader has their style, whether they have used a single tactic or a combination of tactics, depending on the situation. There is a direct relationship between both leadership styles and creative behaviour, and the relationship between transformational leadership and creative behaviour is stronger.
than the relationship between transactional leadership and employee creative behaviour, with succession acting as a mediating variable in both models. It is well recognized that a leader's leadership style significantly impacts the success or failure of business organizations, entire countries, and other social units, claims Anwar (2017) research.

The most of studies show leadership style's link to EP is crucial, and depending on the variables used, different leadership philosophies may or may not be correlated with EP desirably or unfavourably (Ibrahim et al., 2016). A highly efficacious leadership approach generates the competitive advantage. The leadership style enables organizations to attain their goals with effective manners. Efficiency in a leadership role is equivalent to organizational efficiency. Nagendra and Farooqui (2016) demonstrate that while managers use their leadership style, they enhance job satisfaction among the employees, and they keenly contribute positively to the betterment of the organizations.

2.3 AUTOCRATIC LEADERSHIP STYLE (ALS)

Mohiuddin (2017) mentions ALS clearly outlines the distinction between managers and workers. It is considered one where the leader retains an incredible degree of control and power. This style of leadership merely considers employee recommendations and supposes workers to fulfil instructions without offering any rationalization for why the task must be performed.

Despite being universally despised, this leadership approach is practical when there is a short time window for making decisions. Even now, dictatorship-controlled nations and the military of various regimes still frequently use this kind of leadership. According to Chikazhe et al. (2023), most of those who back autocratic leaders are only biding their time in anticipation of this style of government's ultimate collapse, which would lead to the destruction of the successor. Choy-Brown et al. (2000) even asserts that ALS is highly beneficial in circumstances where alteration needs to be encouraged; these circumstances include scenarios involving resolving conflicts like strikes, confidence implementation, and many more. If employed in the right situation, it produces efficiency. Ispas (2012) revealed that managers most frequently use autocratic management to achieve desired results in a survey on perceived leadership styles and overall work performance in the hotel industry. They also highlighted the need for managers to develop the best plan for assisting employees in boosting their productivity. Still, as extreme as it may sound when it involves running a corporation, there are instances when autocratic
leadership are often suitable for business. Autocratic leaders are outside the business of using their power for oppression; instead, this leadership style focuses on management to push the group forward.

### 2.4 LAISSEZ-FAIRE LEADERSHIP STYLE (LLS)

The French expression "laissez-faire" refers to a strategy of little government intervention in social and individual economic matters (Viner, 1960). In the leadership literature, laissez-faire is unquestionably the term for a "hands off" and let-things-happen style of influencing individuals at work (Pahi et al., 2018). Achhnani (2020) underline that LLS is the need for all forms of leadership or even a person's distance from participating in leadership activities. Appointed supervisors show little interest in both their obligations and the ones that have been delegated to them. Laissez-faire leadership could also be called "zero-leadership" or nonexistent leadership. The performance of the workforce in this form depends on the team members' potential, skills, and competencies (Adler and Reid, 2008).

Associates can make decisions independently, and leaders provide their subordinates complete freedom to act in their style and reach meaningful conclusions. Some eminent researchers say LLS has improved job satisfaction and is a more desirable EP. Still, it could be harmful if staff members are not effectively managing their time or lack the motivation to do their jobs well (Skogstad et al., 2007; Alvi et al., 2023). According to Ahsan and Khalid (2023), LLS by undercutting their objectives and the welfare of their subordinates, undermines the actual motives of organizations, including those of its employees.

The LLS often causes organizational instability since everyone feels like their leader (Peerman, 2023). Chen et al. (2021) argued about the principles of organizational leadership. Furthermore, his research overwhelmingly favours the laissez-faire strategy for bridging the gap between employers and employees. However, his main concern was that laissez-faire would result in a favourable environment where employees and their families would genuinely feel like a community, regardless of the various roles they play within the organization.

Allen et al. (2013) states that a LLS may be effective, provided the boss periodically evaluates EP and makes ideas. When each team member has years of experience, is highly qualified, dependable, driven, and capable of doing the work
independently, the leadership style will be effective. According to the research, the LLS's main advantage is that it gives employees a lot of autonomy, leading to higher work satisfaction and increased organizational efficiency. The delinquent with those listed above in the African setting is that political involvement made it challenging to practice laissez-faire, given the requirement to supervise staff fully.

Additionally, one's level of motivation and discipline is called into question. Laissez-faire leadership should be apparent. Leaders that practice laissez-faire have a reliance and trusting attitude towards their workforce. They refrain from micromanaging, becoming too involved, and over-instructing or over-directing. Conversely, laissez-faire leaders empower their team members to use their initiative, resources, and experience to support them in achieving their goals. Because they have confidence in their team members' skills and abilities, managers who utilize this style are pretty hands-off. They set the agenda and take charge when necessary, but this leadership style encourages team members and subordinates to take the initiative. Only some employees or leaders have to be a fan of this leadership approach. Leaders will likely choose different management philosophies that work well for their organization. Knowing all of them and how they work is essential to seek out the perfect typical leadership style. Someone learning more about the LLS and how to implement it as a leader or manager in an organization will make him a much better leader.

2.5 DEMOCRATIC LEADERSHIP STYLE (DLS)

A DLS is a management style involving groups already present in the organization in decision-making between the management and the subordinates (Sulistyawati et al., 2023). The leader DLS practices social justice and divides decision-making authority with groups. DLS, also known as shared leadership or participatory leadership, is a leadership strategy that involves greater active participation from group members in decision-making (Van De Mieroop et al., 2023).

This leadership style may benefit any organization, including public institutions like schools and commercial corporations. According to various social, political, economic, and cultural factors throughout time and geography, each leadership approach has benefits and drawbacks for enhancing organizational EP (Nanjundeswaraswamy, 2023). DLS has the advantage of encouraging open communication and respect among team members, but it also has the drawback of taking more time to implement choices.
Democratic leaders also frequently have to cope with rejection. This managerial approach encourages staff members to take part in organizational decision-making. A democratic leader shares decision-making and problem-solving duties with their team and keeps them informed about anything that impacts their job (Odeh et al., 2023). A DLS has many advantages, but there are also some dangers. The DLS, according to Khan et al. (2023), has several flaws that must be remedied to prevent unfavourable effects on the effectiveness and performance of the organization.

The authors identified five difficulties with crises: consensus, competence, adherence, and pseudo-participation. The author advised executives to use employee happiness and retention strategies to address these issues, enhancing EP. DLS is a leadership strategy in which group members actively engage in decision-making. It is sometimes referred to as participatory leadership or shared leadership. This leadership style might benefit any organization, including the government, private sector, and academic institutions. A DLS allows for widespread participation, unrestricted idea sharing, and discussion. Even though this approach strongly emphasizes group equality and the free exchange of ideas, the democratic leader is still there to give guidance and control. The democratic leader must also decide who belongs to the group and has the authority to make decisions. The DLS is one of the most effective forms, according to research, and it boosts group morale, productivity, and contributions from all members.

2.6 BUREAUCRATIC LEADERSHIP STYLE (BLS)

BLS is one of the styles that can be considered postulated. It is a management approach whereby workers are forced to abide by particular guidelines and hierarchies established by the bosses. In other words, the leadership style shown by the bureaucratic leadership pattern that focuses on the administrative demands of the organization is this collection of leaders’ functions based on official regulations defined by higher authorities inside the organization.

Various groups and departments in the public and commercial sectors use this management approach. However, it is frequently employed in the public sector, where success depends significantly on consistency and obedience to rules and regulations.

On the other hand, its benefit is the elimination of favouritism and centralizing tasks and functions within a team. Increasing production can be harrowing, and there is no room for innovation. BLS is sometimes described as a management style
that employs a hierarchy and established official responsibilities. Employees must abide by particular directives and regulations found by their superiors under this leadership style. We are sufficiently turned off by the definition provided above and the word bureaucracy.

While it is frequently accurate, the broad disapproval of government and authoritarian processes does not improve the situation. However, many organizations use the bureaucratic leadership structure to their benefit since it is a dependable technique for controlling organizations. Bureaucratic leadership structures are frequently helpful for heavily monitored firms whose success depends on effective administration. This kind of leadership can be helpful when creativity, problem-solving, or innovation aren't always required.

Consequently, although resources are limited, leaders must behave in a way consistent with the organization's mission and overall condition. An organization with successful leadership is like a ship with a captain where resources are widely used (Zhang and Basha, 2023). In today's highly competitive climate, businesses grow internationally and encounter several difficulties in achieving their goals and trying to outperform rivals. Kehinde and Banjo (2014) stressed the significance of leaders in an organization.

Those mentioned above should promote effectiveness, specialization, excellent organizational connections, and effective feedback, as Lesmana et al. (2023) highlighted. According to Andrews et al. (2012), leadership persuades others to achieve a common objective. This expresses the concept that leaders work with others to accomplish goals. Due to its influence on EP, leadership style is crucial to any organization's success. Leadership is now more critical than ever as a managerial quality in a social, economic, and technical world that is continually evolving (Aunga and Masare, 2017).

Numerous literary works emphasize how effective leadership behaviours may enhance leadership competence and employee performance. Different organizations need strong leadership philosophies that inspire employees to achieve well. Regarding policies and processes, Petrochemical Companies operate consistently, although EP differs from project to project. When the EP assessment is followed, a task inside the organization meets its objectives by the deadline. In contrast, the organization's remaining duties fell short of its objectives.
This dilemma arose because a different experience was required, and the intended solution was to strategically apply certain leadership philosophies to the unique set of circumstances. This issue was constantly impacting EP in the organization. This outcome demonstrates unequivocally that there are significant variations in job performance across organizational projects. An organization dedicated to the community and the energy industry is Petrochemical Companies.

As a result, poor leadership style jeopardizes the organization's commitment to the community through delays in the quality of delivery required amount of oil and gas, dissatisfaction with beneficiaries, inability to meet performance targets, and poor EP. This fact influences EP in the organization.

Annual assessment reports need the organization to deliver high-quality services. Lack of effective leadership abilities is expensive for the company, especially in maintaining high service standards. Due to the need for increased strategic participation of specific leadership trajectories in the situations that were predicted as the difficulties at hand, the issues mentioned above came to be.

These issues were consistently hindering the organization's development and EP. Therefore, the core objective of this study was to determine the effect of several leadership styles, including BLS, DLS, ALS, and LLS, on EP, particularly in petrochemical companies. Based on these problems and existing relationships in the literature, the researchers proposed Figure 1 for investigation among the employees of petrochemical companies in Saudi Arabia.

**Figure 1 – Proposed Model of the Study**

![Proposed Model of the Study]

Source: Prepared by the authors (2023)
Based on the relationships in the literature and model, the researchers developed the following hypotheses:

H1: OB positively and significantly predicts performance among employees who work in petrochemical companies in Saudi Arabia.

H2: ALS positively and significantly predict performance among employees who work in petrochemical companies in Saudi Arabia.

H3: LLS positively and significantly predict performance among employees who work in petrochemical companies in Saudi Arabia.

H4: DLS positively and significantly predict performance among employees who work in petrochemical companies in Saudi Arabia.

H5: BLS positively and significantly predict performance among employees who work in petrochemical companies in Saudi Arabia.

3 DATA AND METHODOLOGY

3.1 APPROACH AND SAMPLES

The strategy used during the study process is described by the research design. It outlines the researcher's approach to answering the questions and emphasizes the importance of providing the research questions with a clear structure (Saunders et al., 2009). The study used a descriptive research design method that quantitatively synthesized the empirical evidence of research. Several researchers preferred the descriptive method; Hartley (2004), for instance, argued that descriptive studies commonly employ inductive analysis because they compile data to support theory building, which is crucial for both the study's findings and the author's work. (Creswell, 2003) emphasizes the significance of the survey's quantitative focus as: By examining a sample of that group, a survey design can offer a quantitative or numerical description of that population's trends, attitudes, or views. The researcher extrapolates or asserts generalizations about the population based on sample data. Consequently, a quantitative research strategy is used in this study.

The samples are important as these represent certain populations due to the fact that it is not easily for the researcher to cover the whole populations or people within a certain institution. So, the targeted respondents of the study were employees of petrochemicals company’s employees in Saudi Arabia. The survey was online based through Google forms and 165 respondents participated in this survey.
3.2 INSTRUMENTAL RELIABILITY AND VALIDITY

We ensured reliability as it improved the data analysis process and accurate analysis results (Singh, 2017). Before moving towards final data collection, we conducted a pilot study by collecting 35 samples of employees to ensure pre-testing of the questionnaire to eliminate any chance of bias in the research. We noticed the internal consistency among items through Cronbach's alpha reliability. Besides, we applied factor loading to ensure further the items' connections with their respective factors (Hair et al., 2006). As a result, the overall reliability of the scale is found to be 0.796, while individuals' factor reliability is greater than 0.70 as fair (Hair et al., 2019). Besides, the factor loading scores through the pilot study also ranged within the recommended values above 0.70 (Hair et al., 2019).

Moreover, like reliability, the insurance of the validity of the survey instrument is essential to create such a research design and ensure all these elements while planning the appropriate method (Heal and Twycross, 2015). Therefore, in the present study, the validity issue was resolved by ensuring that the question content in the data collecting instruments explicitly focused on the study objectives. The study used a range of approaches to address external validity. The choice of a sample made it possible to examine the subject from all pertinent angles. In addition, this study guaranteed the reliability of the results by using a quantitative survey in which the categories tallied were generated from the theoretically specified ideas. Argyres et al. (2020) asserts that simple counting methods, theoretically developed and ideally based on participants' categories, provide a way to survey large sets of data, evaluate and revise their generalizations, and eliminate any concerns about the validity of their impressions of the data. Furthermore, we get translated the questionnaire in Arabic employing back translation technique (Maneesriwongul and Dixon, 2004) and used both versions (English and Arabic) to further enrich the depth of validity perspectives.

3.3 DATA COLLECTION PROCEDURES

The data for this study are gathered through an online questionnaire using Google Forms. The questionnaire is borrowed from the domain literature. The researchers applied convenience sampling modes to reach out to the respondents. Before sending the survey, we determine the willingness of petrochemical companies' employees in Saudi Arabia to contribute to the study. We considered the respondents' ethical values by making them
aware of the aim and objectives of the research and provided them with a complete guide to fill out the survey (Buchanan and Hvizdak, 2009). We made assured them of giving their responses voluntarily. We assured their privacy and confidentiality regarding their responses and usage, specifically for study purposes only. Finally, after these, we sent them the survey questionnaire.

3.4 MEASURES

We adopted all the items of the scale from well-known scholars like Bass and Avolio (1990), Anyango (2015), Tulu (2020), Amussah (2020), Ngozi (2020) and Balemlay (2020). More specifically, EP factor was measured on three items. The sample content of the factor is “Employees in my organization are working with high performance.” OB was assessed on three items with sample item of the scale is “Is it possible for a leader to change his leadership style because of the policies of the organization.” ALS was evaluated on three items. The sample content was “Employees are required to be supervised strongly.” Likewise, the LLS factor was evaluated on four items. The sample item of the scale is “In complex situations my supervisor allows me to solve problems in my own way.” DLS was measured with four items, with sample content as “My supervisor cares about his employees’ opinions.” Finally, BLS factor was assessed with three items with sample item of the scale is “My supervisor always follows organizations instructions”. The researchers applied a five-point Likert scale to give the choices to the respondents. The options of the scale are strongly disagree=1; disagree=2; neutral=3; agree=4 and strongly agree=5.

4 FINDINGS

4.1 DEMOGRAPHIC ANALYSIS

The demographic trends suggest that of the 165 total respondents, the gender distribution suggests 70% (n=116) were male against 29.7% (n=49) female. The data concerning respondents' age demonstrates that 3.7% (n=6) of the respondents were over 60 years old, which represents the minority; 18.2% (n=30) of them were within the ages of 51 to 60 years; 23% (n=38) of the respondents fell within the ages of 41 to 50 years; 36.9% (n=61) were in the age group of 31 to 40 years old, which represents the majority; 18.2% (n=30) were between 22 and 30 years. This outcome shows that the study sample had a good amount of diversity to produce reliable results. Likewise, 1.8% (n=3) of the
respondents had an enrollment, 12.7% (n=21) had a diploma, 40.6% (n=67) had a bachelor's degree, 40.6% (n=67) had a master's degree, 4.3% (n=7) had other degrees. So, most respondents are bachelor's degrees and master's degree holders. Concerning respondents' present job sector, 75% (n=124) work in the Petrochemical Companies, representing the majority, and 25% (n=41) are employees working in other sectors. Similarly, the data regarding years of experience suggest that 26% (n=43) have 1 to 5 years of experience, and 28% (n=46) employees have 11 to 15 years of experience. 40% (n=66) employees have 6 to 10 years of experience, which is the majority, and 6% (n=10) employees have over 15 years of experience, considered a minority. The demography regarding their position in organizations suggests that 24% (n=40) are department heads, and 35% (n=58) are supervisors. 35% (n=57) are normal workers, and 6% (n=10) are employees with other positions considered as a minority. The final demographic indicator (awareness about leadership styles) underlines that 81% (n=133) are aware of leadership styles, and 19% (n=32) are not knowledgeable about leadership styles which is considered a minority (Table 1).

Table 1 – Demographic Information of the Respondents

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<th>Construct</th>
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<th>Frequency</th>
<th>Percentage (%)</th>
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<td>Female</td>
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<td>12.70</td>
</tr>
<tr>
<td></td>
<td>Bachelor's</td>
<td>67</td>
<td>40.60</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>67</td>
<td>40.60</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>7</td>
<td>4.30</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165</td>
<td>100.00</td>
</tr>
<tr>
<td>Petrochemical Companies</td>
<td>Yes</td>
<td>124</td>
<td>75.00</td>
</tr>
<tr>
<td>employees</td>
<td>No</td>
<td>41</td>
<td>25.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165</td>
<td>100.00</td>
</tr>
<tr>
<td>Experience [years]</td>
<td>1 to 5</td>
<td>43</td>
<td>26.00</td>
</tr>
<tr>
<td></td>
<td>11 to 15</td>
<td>46</td>
<td>28.00</td>
</tr>
<tr>
<td></td>
<td>6 to 10</td>
<td>66</td>
<td>40.00</td>
</tr>
<tr>
<td></td>
<td>Over 15</td>
<td>10</td>
<td>6.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165</td>
<td>100.00</td>
</tr>
<tr>
<td>Position in the organization</td>
<td>Department head</td>
<td>40</td>
<td>24.00</td>
</tr>
<tr>
<td></td>
<td>Supervisor</td>
<td>58</td>
<td>35.00</td>
</tr>
<tr>
<td></td>
<td>Normal worker</td>
<td>57</td>
<td>35.00</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>10</td>
<td>6.00</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>165</td>
<td>100.00</td>
</tr>
</tbody>
</table>
4.2 RELIABILITY OF SURVEY INSTRUMENT

We ensured the internal consistency among items due to the best and most valuable technique, which provides the initial assessment of the survey tools. In recent years, Cronbach’s Alpha has become a popular tool for dependability estimation (Amirrudin et al., 2021). We applied Cronbach alpha is crucial to keep in mind throughout this process that reliability, regardless of the method used to obtain it, is not a feature inherent in the test itself but rather an estimation of the consistency of a set of items when they are given to a specific group of students to a particular time under a specific set of circumstances for a specific purpose (Taber, 2018). As a result, all of the constructs appeared with greater than 0.60 (> 0.60) (Ratnaningsih and Setyawan, 2022) (Table 2).

<table>
<thead>
<tr>
<th>Area/ construct</th>
<th>No. of items</th>
<th>Cronbach’s alpha coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP</td>
<td>3</td>
<td>0.706</td>
</tr>
<tr>
<td>OB</td>
<td>3</td>
<td>0.729</td>
</tr>
<tr>
<td>ALS</td>
<td>3</td>
<td>0.606</td>
</tr>
<tr>
<td>DLS</td>
<td>4</td>
<td>0.719</td>
</tr>
<tr>
<td>BLS</td>
<td>3</td>
<td>0.708</td>
</tr>
<tr>
<td>LLS</td>
<td>4</td>
<td>0.641</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

Note(s): EP=employee performance; OB=organizational behaviour; ALS=autocratic leadership style; DLS= democratic leadership style; BLS=bureaucratic leadership style; LLS=laissez-faire leadership style

4.3 CORRELATION COEFFICIENTS ANALYSIS

Inferential statistics were applied to the study data using Microsoft Excel and the Statistical Package for the Social Sciences (SPSS). As illustrated in the research methodology in Chapter 3, the regression test is used to verify the hypotheses. It sought to inspect the link between the single dependent variable (EP) and several proposed independent variables (BLS, ALS, DLS and LLS). The results of the Pearson correlation coefficient underlines define the strength and direction of the linear relationship between two quantitative constructs. According to Turney et al. (2022), the cutoff value between two variables can range between 0.5. Table 3 shows the correlation coefficient, which describes the strength and direction of the linear relationship between two quantitative variables.
Table 3 – Pearson Correlation

<table>
<thead>
<tr>
<th>Constructs</th>
<th>DV</th>
<th>MV</th>
<th>IV#1</th>
<th>IV#2</th>
<th>IV#3</th>
<th>IV#4</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>MV</td>
<td>-0.313</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>IV#1</td>
<td>0.180</td>
<td>-0.071</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>IV#2</td>
<td>0.197</td>
<td>0.047</td>
<td>0.322</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>IV#3</td>
<td>0.492</td>
<td>-0.157</td>
<td>0.170</td>
<td>0.242</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>IV#4</td>
<td>0.280</td>
<td>-0.065</td>
<td>0.016</td>
<td>-0.021</td>
<td>0.185</td>
<td>-----</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

Moreover, Table 4 illustrates that OB (MV) has a moderate negative impact on EP (DV), and ALS (IV#1), laissez faire (IV#2) and BLS (IV#4) has a week positive impact on EP (DV). While DLS (IV#3) has a strong positive relationship with EP (DV).

Table 4 – Pearson correlation coefficient

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pearson correlation coefficient (r) value</th>
<th>Strength</th>
<th>Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>DV-MV</td>
<td>-0.313</td>
<td>Moderate</td>
<td>Negative</td>
</tr>
<tr>
<td>DV-IV#1</td>
<td>0.180</td>
<td>Weak</td>
<td>Positive</td>
</tr>
<tr>
<td>DV-IV#2</td>
<td>0.197</td>
<td>Weak</td>
<td>Positive</td>
</tr>
<tr>
<td>DV-IV#3</td>
<td>0.492</td>
<td>Strong</td>
<td>Positive</td>
</tr>
<tr>
<td>DV-IV#4</td>
<td>0.280</td>
<td>Weak</td>
<td>Positive</td>
</tr>
</tbody>
</table>

Source: Prepared by the authors (2023)

4.4 MULTIPLE REGRESSION ANALYSIS

The β coefficient underlines specifically what variable significantly predicts the dependent variable and how predictable independent variables impact the dependent variable. More specifically, three out of five hypotheses (two independent variables and one mediator variable) were statistically significant: OB (T = -3.678, p<0.001, β = -0.240), DLS (T = 5.604, p<0.001, β = 0.383), and BLS (T = 2.979, p=0.003, β = 0.195) in EP. ALS, on the other hand, was not statistically significant in EP (T = 0.922, p=0.358, and β = 0.063). Also, LLS was not statistically significant in EP (T = 1.427, p=0.155, and β = 0.099) (Table 5).

Table 5 – Multiple Regression Test- coefficients

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>Std. Error</td>
<td>β</td>
<td>T</td>
<td>Tolerance   VIF</td>
</tr>
<tr>
<td>Constant (Intercept)</td>
<td>0.879</td>
<td>0.652</td>
<td>1.347</td>
<td>0.180</td>
<td>----</td>
</tr>
<tr>
<td>H1 = OB → EP</td>
<td>-0.309</td>
<td>0.048</td>
<td>-0.240</td>
<td>-3.678</td>
<td>0.001</td>
</tr>
</tbody>
</table>
5 DISCUSSION AND CONCLUSION

For the first hypothesis (H1), the result of the analysis statistically supports the prior assumption. Specifically, the findings showed that OB has positively affected EP. OB can help to improve EP. Thus, OB can significantly affect EP. This validates this hypothesis and matches the findings of (Iskandar, 2019; Gravina et al., 2021; Widarko and Anwarodin, 2022; Chen and Chen, 2023; Silva et al., 2023; Ria 2023), who confirmed that there is a positive and significant impact of OB on EP. OB shapes how an employee will act and respond to his work. Most respondents indicated that OB has a strong relationship with EP, and that perfectly corresponds with research from Danish et al. (2013) and (Utomo et al. 2023), who confirmed the critical role of OB and work environment in EP and behaviour. As a result, OB significantly influences petrochemical companies’ employees.

Unlike the first previous hypothesis, the ALS (H2) has no statistical impact on EP in the context of the petrochemicals sector. This result contradicts many prior studies (Chua et al., 2018; Zhang et al., 2022; Koveshnikov et al., 2023). Gimuguni et al. (2014) examine the relationship between the ALS and EP and find that ALS positively affects EP. However, since this study focuses only on the petrochemical sector and a small population, there could be variations in the result. The possible explanations for this phenomenon come from several directions. One of the possible causes is the characteristics and cultural differences of the study's population; as mentioned earlier, most respondents are between 21 to 30 years old. This segment of society usually needs a higher level of experience and awareness of leadership styles. This contributed to the results being different from what was expected.

The analysis outcome for the third hypothesis, LLS (H3), is also insignificant. There is no statistical impact on EP in the context of the petrochemicals sector. This result is opposed to that of many prior studies (Iqbal et al., 2021; Robert and Vandenbergh, 2022; Beauty and Aigbogun, 2022) who reported a positive relationship between EP and
LLS. However, since this study focuses only on the petrochemical sector and a small population, there could be variations in the result. The possible explanations for this phenomenon come from several directions. One of the possible causes is the characteristics and cultural differences of the study's population; as mentioned earlier, most respondents are between 21 to 30 years old. This segment of society usually has low experience and awareness of leadership styles. This appears to have contributed to the results being different from what was expected.

The analysis's findings for the fourth hypothesis (H4) support the proposed hypothesis statistically. The results demonstrated that EP is positively affected by the DLS. This outcome is accorded with the studies of Gimuguni et al. (2014), Oussible et al. (2022), Khudhair et al. (2022), Syamsuddin (2023) and Sinurat et al. (2023) on EP and leadership styles, which explains how leadership styles can make an effect on EP. Similarly, Kehinde and Banjo (2014) contend that DLS is a crucial predictor of EP.

For the fifth hypothesis (H5), the result of the analysis statistically supports the prior assumption. Specifically, the findings showed that the BLS had positively affected EP. A BLS can improve EP. This validates this hypothesis and matches the results of Anyango (2015), Ohemeng et al. (2018), Nguyen et al. (2023) and Lubis (2023), who examined the effects of BLS on EP. Also, the conclusions are related to the research conducted by Asrar-ul-Haq Kuchinke (2016), who examined how BLS affected employees' perceptions of their leader and performance. Both of these studies have confirmed a significant positive effect of BLS on EP.

To sum it up, overall, this study provides insights into four different factors that influence EP. The multiple regression analysis confirmed a significant relationship between the three hypotheses that they positively impact EP. However, two predictors became statistically insignificant and demonstrated a discrepancy in the relationships with EP.

The study of how individuals and groups within an organisation behave, interact, and make choices is referred to as organisational behaviour. Employee motivation, communication, team dynamics, and organisational culture are all covered. Understanding organisational behaviour is critical for good leadership and management because it enables leaders to foster a healthy work environment and achieve organisational objectives. In contrast, leadership styles refer to the many techniques and behaviours that leaders employ to guide and influence their followers.
6 CONTRIBUTION OF THE STUDY

These findings generally confirm the value of leadership styles and recommend that companies make training programs to create a better environment to increase EP and give them their best to achieve the organization's goals. Employers expect their workers to perform, and managers demand the same from their subordinates. The findings of this study shed light on the kind of leadership that workers value in their managers. This knowledge may be used to generate strategies and satisfy organizational needs through improving leadership conduct. The findings suggest specific ways to enhance the leadership and EP of supervisors. It indicated that increased EP would result from a DLS and BLS.

Leaders or supervisors should be aware of what is crucial for their teams and businesses and inspire their team members to view possibilities and problems in new ways. Supervisors should also have their own goals and strategies for helping subordinates grow as team players and collaborative workers. Supervisors should be innovative and inspire associates to look for more options and possibilities rather than settling for performance that meets standards. Supervisors should be aware of the values of their employees and develop business strategies, plans, procedures, and practices for their department or unit that will likely enhance employees' well-being. Respect for people is essential to developing a good working relationship between managers and staff.

Because it can raise their level of performance, employees choose supervisors that exhibit idealized qualities and leadership practices. Since employees desire to see more idealized attributes in their superiors, managers should take steps to encourage trust in their staff. They should develop connections with teams and people in the professional world outside their self-interest. In the face of the challenge, it is imperative to exude confidence and strength. Supervisors need to get involved as soon as an issue emerges. Supervisors must make decisions and solve urgent situations fast.

They shouldn't be reluctant to participate in problem-solving. The findings of the correlation study showed a strong association between Laissez Faire leadership and EP. Based on the present research results, leadership programmes could assist leaders in comprehending the connections between EP and effective leadership styles. Organizations might provide specialized training programmes or professional mentorship for supervisors and leaders. Experts and trainers may use the results of the current study to construct training programmes that support leadership development. Organizations may
provide interventions or leadership development programmes to improve the leadership of supervisors. The leadership training curriculum may be tailored based on organizational and human needs to get the most out of such sessions. The interaction between supervisors and workers and the effects of leadership styles on loyalty and EP, including the leader's every day practices, leadership behaviours, and the significance of feedback, require psychological treatments. The company and supervisors should encourage employee participation in decision-making and leadership development whose should also offer training and support for teamwork. Additionally, organizations’ policies and procedures regarding awards or feedback mechanisms can be changed to better match the demands of their workforce.

7 LIMITATIONS AND FUTURE RESEARCH

Although this study may offer valuable contributions to the existing literature on EP, it still needs some limitations. These limitations suggest directions for future research. The use of closed-ended questionnaires in this study may have some disadvantages. For instance, a respondent's misunderstanding of a question can go undiscovered, or the questions themselves may offer thoughts that the respondent would never have. Additionally, the 5-point Likert scale assumes an even metric number between each point, so it cannot reflect the respondents' actual attitudes. Differences in gender, age group, and work position may substantially impact how leadership styles are perceived and EP. Furthermore, the participants' responses will likely be influenced by the questions they have already been asked or that they would emphasize one side of the agree/disagree spectrum. These issues suggest that future studies consider using interviews to understand better leadership styles and how they affect EP. Another limitation of this study is that the respondents were males between 21 and 30 years old. The sample used made the observations less objective and introduced the potential for sampling bias.

Future research can increase diversity by gathering data using techniques other than online platforms or social networking sites to understand better how leadership styles can influence the performance and outcomes of petrochemical companies.
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REFERENCES


