The Effect of Psychological Empowerment on Employee Performance with Mediation Role of Job Satisfaction: Evidence from Egyptian Oil and Gas Sector

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Abstract
The goal of this research is to empirically investigate the effect PE (PE) on employee performance (EP) with Mediation Role of job satisfaction (JS) in the Egyptian oil and gas sector. The objectives of this research are: to investigate the relation among PE and employee performance, to test the relation among PE and job satisfaction, to investigate the relation among JS and employee performance, and to examine the mediation role of JS among PE and employee performance. The methodology used is focused on quantitative analysis utilizing an online survey tool to collect the necessary data and AMOS software for structural equation model analyses (SEM). The study's findings revealed that: all the hypotheses are supported. Finally, the study found that there is a partial mediation effect of the JS among PE and EP in Egyptian oil and gas sector.

Keywords: Psychological Empowerment, Employee Performance, Job Satisfaction, Egyptian Oil and Gas Sector.

Introduction
EP and JS have a significant role in determining the success of an organization. According to self-determination theory, satisfying three basic psychological needs-autonomy, competence, and relatedness can improve motivation and general health (Deci et al., 2017). Previous research has found positive relations among self-determination, JS and EP. However, limited research exists in the context of the Egyptian oil and gas sector.

PE has been demonstrated to positively affect employee attitudes and behaviors in the workplace across various contexts (Seibert et al., 2011). In addition, PE is a concept that has gained significant attention in the field of organizational behavior in recent years. It is defined as the perception that one has the freedom, competence, and self-determination to make decisions and take actions that influence one’s work and the organization as a whole. When employees feel empowered, they are more likely to be motivated, engaged, and productive. Additionally, empowered employees are more likely to be satisfied with their jobs and to stay with their organizations (Llorente, Alonso et al., 2023).
The influence of PE on employees’ performance through JS is a relevant and important topic for the oil and gas sector, which is characterized by high uncertainty, complexity, and risk. PE is defined as “a motivational construct manifested by four cognitions: meaning, competence, self-determination, and impact” (Spreitzer, 1995; Malik et al., 2021). JS is defined as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (Locke, 1976, cited in Onyemeh, 2017). EP is defined as “the degree to which an employee accomplishes work tasks assigned by the organization” (Campbell, 1990; Pradhan & Jena, 2017).

Previous studies have examined the relations among PE, job satisfaction, and EP in different service sectors, such as hotels, food service, banking, call centers, and airlines (Onyemeh, 2017; Yavas et al., 2013). However, there is a lack of empirical evidence from the oil and gas sector, especially in the Egyptian context, which has a unique cultural, economic, and political environment. Therefore, this study aims to fill this gap by exploring the influence of PE on employees’ performance through JS in the Egyptian oil and gas sector.

This paper aims to investigate the influence of PE on employees’ performance, exploring the mediating role of JS within the specific context of the Egyptian oil and gas sector. As organizations increasingly recognize the importance of employee autonomy and motivation, understanding the relation among PE, job satisfaction, and performance becomes crucial.

Literature Review

PE is considered as the independent variable; JS is considered as the mediator variable and EP is considered as the dependent variable. In the following subsections we will discuss:

Psychological Empowerment

PE is a motivational, subjective, and cognitive process where individuals regard themselves as capable and competent to complete tasks effectively. Furthermore, the tasks are considered pertinent and significant, and individuals perceive they have autonomy in choosing them. Spreitzer (1995a, b) established the most thorough theory of PE. The approach incorporates both the social-structural factors that come before physical education and its resulting behavioral outcomes (Qing et al., 2020). Seibert et al. (2011) conducted the initial meta-analytical assessment of the notion of PE, using other theoretical perspectives like the social-structural and team-based methods.

Empowerment enhances job happiness by offering increased autonomy and purpose (Seibert et al., 2011). Satisfied employees demonstrate increased dedication, effort, and production. The researcher concentrated on empowerment as a collection of human resource strategies that result in employees feeling psychologically empowered in the workplace. The researchers in this study aimed to explore how employees perceive empowerment through four characteristics of PE: meaning, competence, self-determination, and influence (Spreitzer, 1995) and its influence on employee performance.

Job Satisfaction

JS is a critical factor influencing EP (Locke, 1976, cited in Onyemeh, 2017). Studies have consistently shown that satisfied employees are more likely to be engaged, committed, and productive (Judge et al., 2017; Toscano & Zappalà, 2020). Within the oil and gas sector, JS becomes particularly pertinent due to the demanding nature of the work and its influence on overall performance (Breaugh, 2008; Hammond et al., 2023).

JS continues to be a key factor influencing EP (Locke, 1976, cited in Onyemeh, 2017). Studies consistently show that satisfied employees tend to be more engaged, productive, and committed to their
organizations (Algarni & Alemeri, 2023). The exploration of how meaning in work contributes to JS and, subsequently, performance, is an emerging area of interest in organizational psychology.

**Employee Performance.**

PE may enhance employees’ motivation and give positive influence to their level of performance (Azlan & Wahab, 2020) and contribute to the organizational performance (Landry & Whillans, 2019). Based on earlier research, employees’ perceptions of empowerment lead to sentiments of motivation, which in turn drives them to deliver exceptional customer service and task performance. This is supported by research from Tuffaha (2020), which shows that information and communication technology, knowledge management, and employee empowerment are all elements that affect employees’ performance.

According to Pradhan & Jena, (2017), that “EP signifies individual’s work achievement after exerting required effort on the job which associated through getting a meaningful work, engaged profile and compassionate employers around”.

In this context, EP is measured using indicators including service quality and task performance evaluated by the immediate supervisor. Employees’ achievement in meeting the assigned task and the way they deal with the customer are two important components in the present study. Employees are the key customer contact personnel hence might influence the way they deliver the services. It is therefore crucial for the organizations to investigate factors that influence employees’ performance. One of the dimensions that influence service quality is employee competence (Pakurár et al., 2019), which includes capabilities and motivation. Employee competence has influenced over performance. Employees experienced motivation at their work place when they perceived meaning, competence, self-determination and impact make them feel empowered. From this backdrop, empowered and motivated employees will correspond with high performance level.

**Conceptual Framework and Research Hypotheses**

Based on the conceptual framework, the hypothesized model and reviewing of the related studies and theories, the study hypotheses were formulated as below:

- **H1**: It is expected that PE has an impact on EP in the Egyptian oil and gas sector.
- **H2**: It is expected that PE has an impact on JS in the Egyptian oil and gas Sector.
- **H3**: It is expected that JS has an impact on EP in the Egyptian oil and gas sector.
- **H4**: It is expected that JS mediates the relation among PE and EP in the Egyptian oil and gas sector.

**Research Methodology**

Data collected from middle level of management employees working in six Egyptian oil and gas companies while the population embraced all the middle management employees working in the Egyptian Ministry of petroleum and mineral resources. The questionnaire was divided in two broad categories. The first category is made up of general information and the second category is the body of the questionnaire that includes three sections: first: PE. Second section: JS and Third section: employee performance. A Likert-scale was used to measure opinions.
Out of 700 respondents, 434 questionnaires (62%) were returned, 37 (5.3%) were incomplete, ineligible, or refused, and 266 (38%) were not contacted. There were 397 valid responses, with a response rate of 56.7%, which is deemed sufficient for this study.

Results and Findings

Using Composite Reliability (CR), the reliability of a construct in the measurement model may be determined. As stated by Hair et al. (2019), CR assesses the integrity of the construct and provides a more comprehensive picture of overall reliability. The research result shows the CR as (Meaning = 0.852, Competence = 0.828, Self-Determination = 0.918, Perceived Impact = 0.805, JS= 0.906, and Employees’ Performance = 0.941). Thus, it is evident that all constructs in the measurement model exhibit high reliability.

The Average Variances Extracted (AVE) should consistently exceed 0.50. (Hair et al., 2019). AVE for the constructs Meaning, Competence, Self-Determination, Perceived Impact, Job Satisfaction, and Employees’ Performance is over 0.500. The measurement results are satisfactory, indicating that it is suitable to continue evaluating the structural model.

Measurement model result: The six factors were subjected to CFA using AMOS software. DF was 284 (should be greater than 0), and $\chi^2$/DF was 2.784, which is less than 3.0 (should be less than or equal to 3.0). The RMSEA was 0.061 (the value should be less than 0.08). The TLI index was 0.935, which is very near to 1.0 (1.0 denotes perfect match). The CFI was 0.943. All indices are near to 1.0 in CFA, indicating that the measurement models give solid support for the CFA-determined factor structure.

Structural Model

Structural Model Validity: the results of the structural model run through the AMOS software show that DF was 551, which is not the expected value, and that $\chi^2$/DF has a value of 2.860, which is less than 3.0. (It ought to be less than or equal to 0.08), the RMSEA came out at 0.062. A value of 1.0 implies a perfect fit, while the TLI index was 0.913, which is quite close. With a CFI of 0.919. All indices in CFA are close to a value of 1, indicating that the measurement models offer solid model support for the factor structure discovered using CFA.

Results Discussions

The first objective is: to investigate the relation among PE and employee performance. as expected, a relation among Meaning and Employees’ Performance ($\beta = 0.789$, CR (Critical Ratio) = 14.035, CR > 1.96, p = 0.000,
Therefore, (H1): Meaning has an influence on Employees’ Performance in Egyptian oil and gas sector.) is supported. According to Permarupan et al., (2020) meaning enables employees to improve a psychological relation with the organization. According to Al-Makhadmah et al. (2020), meaning is a sense of the significance of employee work as an integral component of the services offered to customers.

Empirical reviews have also discovered that meaning has significantly related to employee’s innovative behavior (Singh & Sarkar, 2012), evidently linked to employee commitment (Ibrahim, 2020) and demonstrated a strong relation with EP in small and medium enterprise (Degago, 2014). Employees are self-assured in carrying out their duties and view the service they offer to customers as significant (Guerrero et al., 2018).

H1.1: Competence has an influence on Employees’ Performance in Egyptian oil and gas sector. (β = 0.851, CR (Critical Ratio) = 22.052, CR > 1.96, p = 0.000, p<0.05). is supported, as it predicts that “There is a relation among Competence and Employees’ Performance”. Competence helps employees to utilize their skills, knowledge and ability in performing the task and develop belief that the job are their responsibility (Permarupan et al., 2020). Encouraging employees to resolve difficult tasks with a high level of confidence to accomplish the task given with success (Al-Makhadmah et al., 2020). Evidently, guided from the above it can be summarized that highly competent employees have a significant effect on service quality, likely to explore new ways of doing things (Singh & Sarkar, 2012) and deliver the task successfully.

H1.2: Self-Determination has an influence on Employees’ Performance in Egyptian oil and gas sector. (β = 0.413, CR (Critical Ratio) = 3.681, CR > 1.96, p = 0.000, p<0.05). is supported, as it predicts that “There is a relation among Self-Determination and Employees’ Performance”. According to Singh & Sarkar (2012), employees can perform the job efficiently and able to find ways to resolve difficult issues at work place. Employees, on the other hand, felt confident enough to explore further chances and novel ideas while taking the lead to deliver the work. Studies have also highlighted that self-determination has significantly related to JS as well as job performance of Tourist Guides (Tetik, 2016), related to the organizational commitment in the lodging industry (Ibrahim, 2020), and employees’ performance in the hospitality industry (Al-Makhadmah et al., 2020). The latter studies also indicated that self-determination is the most influencing factor and as one of the important predictor to the employee performance.

H1.3: Perceived Impact has an influence on Employees’ Performance in Egyptian oil and gas sector. (β = 0.355, CR (Critical Ratio) = 9.069, CR > 1.96, p = 0.000, p<0.05). is supported, as it predicts that “There is a relation among impact and Employees’ Performance”. Employees feel involved and a part of the business activities, and numerous empirical findings have shown that employee influence significantly correlates and predicts EP (Tetik, 2016; Degago, 2014). While impact may have an indirect effect on teachers’ inventive behavior (Singh & Sarkar, 2012), Al-Makhadmah et al. (2020) discovered that it has no effect on hotel employees’ performance. The premise that “H1: PE has an influence on Employees’ Performance in Egyptian oil and gas sector” is supported.

The second objective: is to test the relation among PE and job satisfaction. H2 : Meaning has an influence on JS in Egyptian oil and gas sector. (β = 0.842, CR (Critical Ratio) = 14.278, CR > 1.96, p = 0.000, p<0.05) is supported. Multiple empirical investigations demonstrate a robust positive association among perceived meaningfulness and JS across industries (Bailey et al., 2019). Employees who view their roles as meaningful experience their work as more rewarding and satisfying (Albrecht et al., 2021).

Moreover, H2 : Competence has an influence on JS in Egyptian oil and gas sector. (β = 0.967, CR (Critical Ratio) = 14.035, CR > 1.96, p = 0.000, p<0.05). is supported. Competence satisfaction is the degree to which employees feel capable and effective in their roles (Rusmayanti et al., 2022). When workers feel they possess the skills to meet workplace challenges, this fulfills basic needs, enhancing their motivation and job satisfaction. Moreover, a study of 300 employees at Saudi Aramco found higher levels of competence were
associated with greater job satisfaction, as competent employees felt more confident and able to perform their work well (Alotaibi et al., 2018).

**H2.3:** Self-Determination has an influence on JS in Egyptian oil and gas sector. ($\beta = 0.681$, CR (Critical Ratio) = 12.437, CR $> 1.96$, $p = 0.000$, $p<0.05$) is supported. Numerous studies have shown a significant positive link among self-determination and JS across industries and national contexts (Fernandez & Moldogaziev, 2015; Lam & Gurland, 2008). Moreover, the relation among self-determination and JS has been widely studied in the literature, and the majority of the studies have found a positive and significant relation among the two constructs (e.g., Dou et al, 2016; Spreitzer, 1995). The theoretical rationale for this relation is based on the theory of self-determination (La Guardia & Patrick, 2008), which suggests that self-determination fulfills the basic psychological needs of autonomy, competence, and relatedness, which in turn enhance job satisfaction.

**H2.4:** Perceived Influence has an influence on JS in Egyptian oil and gas sector. ($\beta = 0.554$, CR (Critical Ratio) = 11.679, CR $> 1.96$, $p = 0.000$, $p<0.05$) is supported. Multiple studies have demonstrated a robust positive relation among perceived influence and JS across industries (Seibert et al., 2011; Fernandez & Moldogaziev, 2015). Employees who see their contributions as impactful feel more engaged and dedicated. Furthermore, the existing literature has explored the relations among perceived impact, job satisfaction, and performance in various organizational settings. Research suggests that employees who perceive their work as impactful are more likely to experience higher levels of job satisfaction, leading to improved performance outcomes (Maan et al., 2020). Based on the results “H2: PE has an influence on JS in Egyptian oil and gas sector” is supported.

The third objective is: to examine the relation among JS and employee performance. The result shows that H3: JS has an influence on Employees’ Performance in Egyptian oil and gas sector. ($\beta = 0.534$, CR (Critical Ratio) = 8.002, CR $> 1.96$, $p = 0.000$, $p<0.05$) is supported. The relation among JS and EP has also been extensively studied in the literature, and the results have been mixed and inconclusive. Some studies have found a positive and significant relation among JS and EP(Memon, et al., 2023; Wright & Cropanzano, 2000), while others have found a non-significant relation (Judge et al., 2017; Organ & Ryan, 1995; Sverke et al., 2019). Moreover, enhanced JS can stimulate improved productivity, task execution, and citizenship behaviors (Massoudi et al., 2020). Satisfied employees tend to feel more engaged, expending greater effort into their assigned responsibilities (Memon, et al., 2023).

The fourth objective is: to investigate the mediation role of JS among PE and employee performance. a statistically significant indirect effect among Meaning and Employees’ Performance Through JS ($P = 0.003$, $P<0.05$), The results of the mediation effect indicate that there is partial mediation effect of the JS among the relation of Meaning and Employees’ Performance. Moreover, a statistically significant indirect effect among Competence and Employees’ Performance Through JS ($P = 0.003$, $P<0.05$), The results of the mediation effect indicate that there is partial mediation effect of the JS among the relation of Competence and Employees’ Performance. Further, a statistically significant indirect effect among Self-Determination and Employees’ Performance Through JS($P = 0.002$, $P<0.05$), The results of the mediation effect indicate that there is partial mediation effect of the JS among the relation of Self-Determination and Employees’ Performance. Furthermore, a statistically significant indirect effect among Perceived Impact and Employees’ Performance Through JS($P = 0.003$, $P<0.05$), The results of the mediation effect indicate that there is partial mediation effect of the JS among the relation of Perceived Impact and Employees’ Performance. Therefore, (H4: JS mediates the relation among PE and Employees’ Performance in Egyptian oil and gas sector) is supported. In the same vein, the mediation role of JS in the relation among PE and EP has been relatively less studied in the literature, and the results have been scarce and contradictory. Some studies have found a partial or full mediation effect of JS in the relation among PE
and EP (Dou et al., 2016; Laschinger et al., 2004; Spreitzer, 1995), while others have found no mediation effect of JS in the relation among PE and EP (Onyemeh, 2017).

**Conclusion**

The focus of this research is to investigate into the relation among PE and EP in the Egyptian oil and gas companies with the role of JS as a mediating variable. The study used a quantitative correlational methodology to obtain primary sample data from 397 sample. The regression analysis reveals that:

1- The direct effect among Competence and Employees’ Performance is statistically significant.
2- The direct effect among Meaning and Employees’ Performance is statistically significant.
3- The direct effect Perceived Impact and Employees’ Performance is statistically significant.
4- The direct effect among Self-Determination and Employees’ Performance is statistically significant.
5- The direct effect Competence and JS is statistically significant.
6- The direct effect among Meaning and JS is statistically significant.
7- The direct effect among Perceived Impact and JS is statistically significant.
8- The direct effect among Self-Determination and JS is statistically significant.
9- The direct effect among JS and Employees’ Performance is statistically significant.

**Authors Contributions**

This research paper has dual significance. Academically, it has fulfilled the research gap in literature and explored psychological of empowerment (feeling of empowerment) by the employees working in the Egyptian oil and gas sector, where the finding revealed empowerment predicts employees’ performance. Evidently, from this study four dimensions of PE have been found statistically significant to the employees’ performance with partial mediation role of JS. According to the analysis, At the 5% significance threshold, all are considered significant. the estimated structural model corroborated the nine hypotheses, as PE (Meaning, Competence, Self-Determination and Perceived Impact) construct explained 26.7% of JS variance ($R^2 = 0.267$), Besides, PE (Meaning, Competence, Self-Determination and Perceived Impact) through JS explained 55.8% of Employees’ Performance variance ($R^2 = 0.558$).

Practically, Leaders should focus and make efforts to deploy empowerment initiatives as part of motivating employees and investigate factors that derail the empowerment at work place to higher JS. The Management and Human Resource practitioners must create work supportive environments that provide sharing and channel of communication. Employees have an opportunity for continuous learning and inculcate culture of ownership. Gauging employees’ perception is an important factor that must be considered in every organization due to its influence to their behavioral outcomes. The findings imply that the more empowerment provided by the organizations the more the employees feel empowered which in return will enhance their motivation level to excel in their job

**Research Limitations**

The degree to which the conclusions may be extrapolated to a larger population, cases, or situations is referred to as external validity. (Saunders et al., 2019) As a result, the researcher cannot presume that the findings apply to other situations, so the study excludes:

First, Because the participants in this study come from just one nation (Egypt) and one sector (oil and gas), the findings should be taken with a grain of salt. In spite of the fact that the research was conducted in a very specialized context, it is believed that the findings can be applied to a variety of other sectors, industries, and countries.
Second, cross-sectional data were used in this study to examine the relation PE, JS and performance in the Egyptian oil and gas sector. As a consequence of this, the study only offers a picture of a single instant in time. This suggests that the findings of the research are only useful under certain conditions, including when external factors such as governmental regulations, economic activity, the competitive climate, and so on are unaffected.

Third, Data gathering from respondents over a set period of time utilizing a convenience sample approach had its limitations. The scope of potential responders was constrained by the short time span for data gathering. Because responses are collected based on the accessibility of respondents, this method may not produce a representative sample and may also lead to potential limitations in the range of respondents who would participate.

Future Research Suggestions

The following areas for further investigation are suggested based on the findings of this study:

First, a study should be undertaken utilizing a qualitative technique or a mixed strategy using both qualitative and quantitative approaches.

Second, a longitudinal study should be done to examine the long-term relation among PE and performance in the Egyptian oil and gas, with the mediating role of job satisfaction.

Third, because the sample was limited to only Egyptian oil and gas sector, a sample derived from other sectors, industries would improve the generalizability of the findings in the future.
References:


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