

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

تحليل الدور الوسيط لفعالية الذات في تأثير التمكين الإداري على الإبداع الوظيفي وفق منهجية
نمذجة المعادلات الهيكلية: دراسة مؤسسة الوطنية للكهرباء والغاز

Pr. Khaled Bendjelloul¹, Pr. Walid Bechich², Pr. Salim Medjellekh³

¹ University of May 8, 1945, Laboratory for the Diversification and Digitalization of the Algerian Economy
- Guelma, (Algeria) bendjelloul.khaled@univ-guelma.dz

² University of May 8, 1945, Laboratory for the Diversification and Digitalization of the Algerian Economy
- Guelma, (Algeria), bechichi.walid@univ-guelma.dz

³ University of May 8, 1945, Laboratory for the Diversification and Digitalization of the Algerian Economy
- Guelma (Algeria), medjellekh.salim@univ-guelma.dz

Received: 19/04/2025

Accepted: 30/06/2025

Published: 30/06/2025

Abstract:

This study aims to analyze the impact of administrative empowerment on job creativity, with the inclusion of self-efficacy as a mediating variable within the National Electricity and Gas Company in Guelma. The study adopted a descriptive-analytical approach and employed Structural Equation Modeling (SEM) on a sample of 75 employees. The results revealed a statistically significant direct relationship between administrative empowerment and job creativity. Furthermore, self-efficacy was found to play a partial mediating role, highlighting the importance of enhancing employees' psychological competence to stimulate their creative behavior. The findings also indicated that administrative empowerment alone is insufficient to foster creativity without internal support rooted in employees' confidence in their abilities. The study recommends adopting a management approach that emphasizes employee participation in decision-making and delegation of authority, in addition to investing in the development of self-efficacy through training and psychological support programs, thereby fostering a creative and high-performing work environment.

Keywords: Administrative Empowerment, Self-Efficacy, Job Creativity, Structural Equation Modeling, Work Environment.

JEL Classification Codes: O31, C38 M14, M12,

ملخص:

تهدف هذه الدراسة إلى تحليل أثر التمكين الإداري على الإبداع الوظيفي، مع اختبار فعالية الذات كمتغير وسيط ضمن المؤسسة الوطنية للكهرباء والغاز بقالة. استخدمت الدراسة المنهج الوصفي التحليلي ونمذجة المعادلات الهيكلية (SEM) على عينة مكونة من 75 موظفًا. أظهرت النتائج وجود علاقة مباشرة ذات دلالة إحصائية بين التمكين الإداري والإبداع الوظيفي، كما تبين أن فعالية الذات تؤدي دورًا وسيطًا جزئيًا، مما يعكس أهمية تعزيز الكفاءة النفسية لدى العاملين لتحفيز سلوكهم الإبداعي. وأشارت النتائج إلى أن التمكين الإداري لا يكفي وحده لتحقيق الإبداع دون دعم داخلي نابع من ثقة الفرد بقدراته. توصي الدراسة بضرورة اعتماد مقاربة إدارية تركز على إشراك الموظفين في اتخاذ القرار وتفويض الصلاحيات، إلى جانب الاستثمار في تنمية فعالية الذات من خلال برامج تدريب ودعم نفسي، بما يساهم في خلق بيئة عمل محفزة على الإبداع وتعزز الأداء التنظيمي.

كلمات مفتاحية: التمكين الإداري، فعالية الذات، الإبداع الوظيفي، نمذجة المعادلات الهيكلية، بيئة العمل.

تصنيفات JEL: M12, M14, O31, C38:

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

Introduction

In light of the rapid transformations occurring in the business environment, organizations are increasingly required to adopt managerial strategies that ensure adaptability to change and stimulate initiative and creativity among employees. Among the most prominent of these modern strategies is **managerial empowerment**, which is viewed as an effective means of enhancing employees' self-confidence, expanding their authority, and enabling them to make appropriate decisions without the need for constant referral to upper management.

In parallel, **workplace creativity** is considered one of the key factors that contribute to achieving a competitive advantage for organizations, as it enables the development of new processes and methods that enhance efficiency and improve the quality of services and products. However, the emergence of such creative behavior does not rely solely on organizational factors but is also influenced by individual psychological traits, foremost among which is **self-efficacy**, which reflects an individual's belief in their ability to accomplish tasks and achieve goals.

▪ Research Problem:

Based on the above, the study addresses the following research problem: What is the effect of managerial empowerment on workplace creativity, and what is the mediating role of self-efficacy in explaining this relationship within the work environment?

▪ Research Hypotheses:

- There is a statistically significant positive relationship between managerial empowerment and workplace creativity.
- There is a statistically significant positive relationship between managerial empowerment and self-efficacy.
- There is a statistically significant positive relationship between self-efficacy and workplace creativity.
- Self-efficacy mediates the relationship between managerial empowerment and workplace creativity.

▪ Significance of the Study:

This study holds great significance on both theoretical and practical levels. Theoretically, it seeks to shed light on one of the most relevant contemporary topics in management science—namely, the relationship between managerial empowerment and workplace creativity—while addressing self-efficacy as a mediating variable that has yet to receive sufficient attention in Arab organizational contexts, particularly within the Algerian environment. As such, the study contributes to enriching the scientific literature by offering a theoretical and analytical framework that integrates both managerial and psychological concepts, thereby enhancing a comprehensive understanding of employee behavior in institutions.

Practically, the study is valuable in its potential to offer practical recommendations for decision-makers and HR managers by highlighting the importance of adopting the philosophy of managerial empowerment as a strategic option for developing human capital and fostering a culture of creativity within organizations. It emphasizes that empowerment does not automatically yield positive outcomes unless accompanied by a boost in employees' self-

efficacy, which enables them to make the most of empowerment opportunities in a creative and effective manner.

▪ **Objectives of the Study:**

This study aims to analyze the impact of managerial empowerment on workplace creativity by focusing on self-efficacy as a mediating variable. It seeks to build an explanatory model that clarifies the mechanism by which empowerment influences creative behavior among employees. It also aims to explore how managerial empowerment contributes to strengthening an individual's belief in their own capabilities and encourages them to engage positively with their work environment.

Additional objectives include identifying the extent to which self-efficacy influences the level of workplace creativity and determining whether self-efficacy plays a mediating role between the two main variables. Through this, the study hopes to offer a practical model that can be used in designing training and development programs that target both the psychological and behavioral empowerment of employees—ultimately reflecting positively on performance and creativity in the workplace.

▪ **Review of the Literature and Identification of the Research Gap**

Numerous studies have explored the relationship between managerial empowerment and workplace creativity, incorporating self-efficacy as a mediating variable. These studies consistently highlight that the positive impact of empowerment is not direct, but rather facilitated through enhanced self-efficacy.

For instance, *Gong et al. (2009)* found that transformational leadership influences creativity through creative self-efficacy, emphasizing the importance of boosting employee confidence. Similarly, *Amabile et al. (1996)* stressed the role of a supportive organizational climate, linking empowerment with increased self-efficacy and creativity.

Tierney & Farmer (2002) showed that creative self-efficacy is shaped by managerial support, which in turn fosters creative performance. Meanwhile, *Spreitzer (1995)* developed a scale for psychological empowerment and demonstrated how its dimensions influence innovative behavior. *Seibert et al. (2011)* conducted a meta-analysis confirming that self-efficacy is a key psychological outcome of empowerment.

Despite these contributions, a research gap remains: few studies have systematically integrated managerial empowerment, self-efficacy, and creativity into a single explanatory model—particularly in the Algerian context. This highlights the need for empirical research to address this gap and provide practical insights for local organizations.

1- Theoretical Concepts of Administrative Empowerment:

1-1 Definition of Administrative Empowerment;

The concept of administrative empowerment has been approached from various perspectives in modern management literature, with researchers exploring its dimensions through multiple lenses. This diversity has contributed to a deeper understanding of both its theoretical foundations and practical applications. The six most prominent conceptualizations of administrative empowerment can be summarized as follows:

- Administrative empowerment is viewed as a process of delegating authority and decision-making power from top management to employees. This delegation grants them the autonomy to make decisions within the scope of their responsibilities, thereby enhancing their sense of personal accountability toward their work. (Robbins & Coulter, 2018, p. 276)

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

- Empowerment has been defined as an internal motivator that enhances employees' intrinsic motivation by involving them in organizational processes and providing them with a sense of control over their work.(Spreitzer, 1995, p. 1444).
- The concept of empowerment is grounded in building trust between management and employees by reducing direct supervision and granting employees full confidence in their own capabilities. (Conger & Kanungo, 1988, p. 474).
- Empowerment is seen as a continuous process of developing skills and knowledge that enables employees to perform their tasks efficiently and take on greater responsibilities within the organizational structure. (Bowen & Lawler, 1992, p. 33)
- Empowerment is considered a leadership approach based on involving employees in decision-making processes. It fosters their autonomy within work teams, which positively impacts the quality of decisions and the speed of implementation. (Yukl, 2013, p. 211)
- Empowerment is closely linked to the creation of an organizational environment that encourages creativity and individual initiative by fostering a culture that values open communication and continuous innovation. (Thomas & Velthouse, 1990, p. 672)

Based on the aforementioned concepts, administrative empowerment can be defined as: A strategic managerial process aimed at delegating authority, fostering trust among employees, and enhancing their intrinsic motivation through active participation in decision-making. It is carried out in parallel with the development of employees' skills and competencies within an organizational environment that supports creativity and individual initiative. This, in turn, contributes to improving both individual and institutional performance and achieving organizational goals with efficiency and sustainability.

1-2 The Emergence and Evolution of the Concept of Administrative Empowerment

The concept of administrative empowerment is relatively modern in management thought, and it began to take shape clearly in the 1980s as a response to the profound changes in the business environment and the shift toward human resource management as a strategic asset to enhance organizational competitiveness. This concept emerged in response to the need for more flexible, participatory, and motivating management styles for employees, in light of the declining effectiveness of traditional models based on centralization and strict control.

Some researchers trace the roots of the empowerment concept to motivation theories and transformational leadership, where the emphasis began on the importance of granting employees control over their work environment and involving them in decision-making processes.. (Conger & Kanungo, 1988, p. 474)

The concept flourished in the 1990s, as researchers developed it to include psychological and organizational dimensions such as a sense of competence, meaning, impact, and autonomy. This evolution was reflected in the emergence of the model (Spreitzer, 1995, p. 1444) which is considered one of the most influential models in explaining administrative empowerment from a psychological perspective.

In the context of contemporary developments, administrative empowerment has become one of the fundamental pillars of total quality management and business process reengineering, as well as a key foundation for fostering creativity and innovation within organizations. (Bowen & Lawler, 1992, p. 34) It has also been closely linked to contemporary concepts such as learning

organizations and empowering leadership, which has allowed it to evolve beyond being merely a delegation of authority to become a comprehensive management philosophy.

Digital transformations, globalization, and increased organizational complexity have contributed to deepening the need for empowerment. It has become essential to grant employees greater freedom and trust to make quick decisions that align with the dynamics of the markets.

1-3 Dimensions of Administrative Empowerment:

Administrative empowerment is a multidimensional concept that encompasses psychological, organizational, and behavioral factors. Researchers have identified several key dimensions that represent the essence of empowerment, including participation in decision-making, access to information, autonomy in performance, and administrative support and motivation

- **Participation in Decision-Making**

This dimension refers to involving employees in planning and decision-making processes within the organization, which creates a sense of responsibility and belonging, contributing to enhancing their organizational commitment. Thomas and Velthouse (1990) argue that employee participation in decisions boosts their motivation and gives them a sense of influence and the ability to effect change. (Thomas & Velthouse, 1990, p. 672)

- **Access to Information:**

This dimension involves enabling employees to easily access information and data related to their roles and the organization's performance. Information is a critical resource in supporting employee decision-making and enhancing their performance effectiveness. Bowen and Lawler (1992) emphasized that transparency and the flow of information are essential prerequisites for achieving effective empowerment.. (Bowen & Lawler, 1992, p. 36)

- **Autonomy in Performance:**

This dimension refers to granting employees the freedom to determine how to perform their tasks within a general framework of defined responsibilities, without direct interference from supervisors. Spreitzer (1995) argues that the sense of autonomy or self-determination is a fundamental component of psychological empowerment, which enhances creativity and responsibility.. (Spreitzer, 1995, p. 1444)

- **Administrative Support and Motivation:**

This dimension involves the moral and material support provided by management to employees, whether through training, recognition, or offering positive feedback. Such support contributes to building trust and enhances the sense of self-efficacy. (Conger & Kanungo, 1988, p. 474).

Administrative motivation is a crucial factor in establishing a culture of empowerment within the organization.

1-4 Benefits of Empowerment in the Workplace:

Administrative empowerment is considered one of the key pillars that contributes to improving the performance of both individuals and organizations. Many studies have shown that empowerment goes beyond delegating authority; it also includes enhancing employees' capabilities, creating a more transparent, participatory, and motivating work environment. Below are the main benefits that empowerment brings to the workplace

- **Increased Job Satisfaction:**

Empowerment contributes to improving employees' sense of accomplishment and autonomy, leading to higher job satisfaction and increased organizational loyalty. According to Spreitzer

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

(1995), individuals who feel they have an impact on their work are more satisfied and willing to contribute (Spreitzer, 1995, p. 1448) .

- **Enhancing Individual and Collective Performance:**

When employees are granted the freedom to make decisions and access information, their performance improves due to a sense of trust and competence. Bowen and Lawler (1992) demonstrated that organizations that adopt administrative empowerment achieve higher rates of service quality and productivity.(Bowen & Lawler, 1992, p. 35)

- **Encouraging Creativity and Innovation:**

An empowering work environment provides a safe space for initiative and the proposal of new ideas without fear of punishment, thereby fostering organizational innovation (Thomas & Velthouse, 1990, p. 673).

- **Strengthening Communication and Organizational Trust:**

Empowerment encourages dialogue and feedback between employees and management, which enhances mutual trust and reduces administrative conflicts resulting from centralization and bureaucracy.

- **Reducing Employee Turnover Rates:**

Studies have shown that empowerment leads to greater stability in the workplace by reducing resignation and absenteeism rates, as it fosters a sense of belonging and intrinsic motivation. (Robbins & Coulter, 2018, p. 277)

- **Improving Decision-Making:**

Empowering employees contributes to improving the quality of managerial decisions by leveraging the knowledge and experience of those working on the ground, rather than relying on a traditional hierarchical structure that may be slow or have a limited perspective.

1-5 The Relationship Between Administrative Empowerment, Performance, and Creativity:

Contemporary management literature has demonstrated that administrative empowerment is one of the key drivers of improving job performance and fostering creativity within organizations. Empowering employees by granting them authority, trust, and support creates a work environment that encourages participation, innovation, and accountability. The relationship between administrative empowerment on one hand, and performance and creativity on the other, is interactive and mutually reinforcing, strengthened by the presence of a positive organizational climate

- **The Relationship Between Empowerment and Performance:**

Many researchers indicate that administrative empowerment contributes to improving both individual and collective performance by developing a sense of personal responsibility and competence. Spreitzer (1995) found that psychological empowerment, particularly the sense of meaning, autonomy, and impact, is positively associated with higher levels of performance.

(Spreitzer, 1995, p. 1451). Studies by Bowen and Lawler (1992) also confirmed that organizations implementing empowering policies experience a noticeable improvement in performance outcomes, particularly in the areas of production and services.. (Bowen & Lawler, 1992, p. 34)

- **The Relationship Between Empowerment and Creativity:**

Empowerment is also closely linked to fostering organizational creativity, as it creates a supportive psychological climate for calculated risk-taking and the generation of new ideas. Empowered employees feel that they have the freedom to act and make decisions, which enhances their willingness to propose innovative solutions to problems and improve processes. (Thomas & Velthouse, 1990, p. 673) According to Amabile (1996), creativity requires an environment that supports autonomy and recognition, both of which are key elements in the philosophy of administrative empowerment.. (Amabile T. , 1996)

- **The Integration Between Performance and Creativity:**

High performance cannot be achieved in isolation from creativity and innovation. Therefore, empowerment serves as a strategic bridge that connects operational efficiency with the ability for organizational renewal. When employees feel they have the power to influence and make decisions, they do not just focus on completing assigned tasks but strive to develop and improve them. This creates a type of creative performance that drives the organization toward competitive excellence.

2- Concepts of Self-Efficacy and Job Creativity

2-1 The Concept of Self-Efficacy

Self-efficacy is a core psychological concept in the field of organizational and behavioral psychology, and it has received increasing attention since it was introduced by Albert Bandura within his social cognitive theory. The concept refers to an individual's perception of their ability to organize their behavior and perform tasks required to achieve specific goals within a given context. There are various definitions of self-efficacy, and the following are some of the most prominent ones:

- Bandura defines self-efficacy as an individual's belief in their ability to organize and execute the actions required to achieve specific accomplishments. (Bandura, 1997, p. 3)

This definition is considered the foundational reference upon which most subsequent models have been built..

- Schunk (1991) defines self-efficacy as "an individual's assessment of their abilities to succeed in a specific task, which determines the level of persistence and effort they will exert. (Schunk, 1991, p. 207)
- Pajares refers to self-efficacy as a fundamental psychological factor that contributes to shaping human behavior by influencing choices, efforts, and emotions.. (Pajares, 2002, p. 4)
- Researchers Strackinger and Green view self-efficacy as the personal judgment of an individual's ability to perform a specific behavior in a particular situation. (Stajkovic & Luthans, 1998, p. 66)

Based on the previous definitions, a composite definition of self-efficacy can be presented as follows:

Self-efficacy is an individual's conscious awareness of their ability to control and regulate their behaviors, mobilize their efforts and skills to face challenges, and achieve specific goals within a given time frame or job context. This affects their level of motivation, persistence, and accomplishment.

2-2 Theoretical Foundations of Self-Efficacy:

Self-efficacy is based on a solid theoretical framework that primarily stems from Albert Bandura's **Social Learning Theory**, which later evolved into the **Social Cognitive Theory**. This theory assumes that humans are not merely passive recipients of environmental influences;

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

rather, they are active beings capable of affecting and interacting with their environment through cognitive and social processes.

Bandura (1997) identified four main sources that form the theoretical pillars of self-efficacy:

- **Mastery Experiences:**

Success in previous tasks is considered one of the strongest sources of self-efficacy, as it enhances an individual's confidence in their ability to replicate that performance in the future. Conversely, repeated failures can weaken self-efficacy, particularly if they occur in the early stages of learning. This concept emphasizes the importance of achieving small successes, as they create a foundation for future accomplishments and bolster one's belief in their capabilities. (Bandura, 1997, p. 80)

- **Vicarious Experiences :**

Individuals are influenced by observing others—especially those who resemble them—in achieving success, which raises their own sense of self-efficacy. The more similar the individual is to the model, the stronger the impact of observation on building their self-efficacy. This emphasizes the role of social learning, where seeing others succeed can boost one's belief in their own abilities, especially if the individual feels a personal connection to the observed person.. (Schunk, 1991, p. 208)

- **Verbal Persuasion :**

Verbal encouragement and motivation from teachers or organizational leaders play a crucial role in enhancing self-efficacy, especially when coupled with practical support and appropriate training. This type of positive reinforcement can help individuals overcome self-doubt and build confidence in their abilities, making them more likely to persist in challenging tasks and achieve success. (Pajares, 2002, p. 5)

- **Physiological & Affective States:**

These foundations refer to the impact of an individual's emotional and physiological state on their self-perception. Stress and anxiety can weaken the sense of ability, while positive emotional states enhance self-belief and personal competence. When individuals feel relaxed and emotionally positive, they are more likely to perceive themselves as capable and confident in their abilities, which boosts their motivation and performance. (Stajkovic & Luthans, 1998, p. 242).

These theoretical foundations highlight that self-efficacy is not a fixed trait, but rather a dynamic and contextual concept that is influenced by the environment, experiences, and social surroundings. Therefore, building strong self-efficacy requires training and educational programs aimed at developing self-confidence, managing stress, and encouraging incremental achievement.

2-3 Self-Efficacy Determinants and Their Impact in the Workplace:

Self-efficacy is considered one of the dynamic psychological variables that are influenced by several internal and external determinants, which interact with each other to shape an individual's perceptions of their own abilities. These determinants play a crucial role in explaining individuals' behavior within the workplace, particularly in terms of performance, commitment, initiative, and coping with stress.

- **personal (Internal) Determinants:**

These determinants include an individual's psychological traits such as emotional intelligence, emotional stability, acquired self-efficacy, and level of ambition. Among these factors, emotional and physiological states have a direct impact on an individual's perception of their competence. Negative emotions, such as anxiety or fatigue, tend to reduce self-efficacy, while positive emotions enhance levels of confidence and engagement. (Bandura, 1997, p. 106)

- **Environmental (External) Determinants:**

These include the work environment, organizational support, leadership style, psychological climate, and availability of resources. The more a stimulating and supportive environment is provided, the greater the enhancement of self-efficacy among employees. For example, motivational leadership and behavioral modeling by supervisors contribute to increasing self-efficacy, while organizational policies that encourage continuous learning further strengthen this aspect. (Stajkovic & Luthans, 1998, p. 243)

- **Social Determinants:**

These include social support, feedback, and group affiliation. These factors significantly influence the formation of self-efficacy, as positive recognition from colleagues and supervisors contributes to building a sense of capability and acknowledgment.

2-4 Impact of Self-Efficacy in the Workplace

Self-efficacy is not only an indicator of an individual's self-perception, but it also directly influences: (Schunk, 1991, p. 210)

- **job Performance:** High self-efficacy is associated with increased effort, perseverance, and determination to achieve results.
- **Organizational Flexibility:** It enables individuals to adapt to change and face challenges.
- **Job Satisfaction and Commitment:** The sense of self-ability enhances professional satisfaction and emotional attachment to the organization.
- **Creativity and Initiative:** Individuals with high self-efficacy tend to innovate and propose solutions rather than waiting for instructions

2-4 Concept of Job Creativity:

Job creativity is a central concept in modern management and psychological literature due to its vital role in enhancing institutional excellence and organizational innovation. It refers to individuals' ability to generate new and useful ideas that contribute to improving performance and developing work, whether at the level of processes, products, or solutions.

Below are the key definitions of job creativity as outlined in theoretical research:

- Teresa Amabile defines creativity in the professional context as the generation of new and appropriate ideas or solutions related to the work tasks performed by the individual within the organization.. (Amabile T. , 1983, p. 360)

This definition emphasizes two fundamental dimensions: novelty and appropriateness.

- Researchers Oldham and Cummings define job creativity as a behavior characterized by the generation of new ideas or procedures within the work context, contributing to the improvement of processes or the development of products.. (Oldham & Cummings, 1996, p. 608)

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

- Woodman et al. describe workplace creativity as a complex interaction between the individual and their environment that results in a new and useful idea or product within the organizational context.. (Woodman, Sawye, & Griffin, , 1993, p. 293)
- Zhou and George define professional creativity as the engagement in activities aimed at generating new ideas and improving procedures, which are later adopted within the organization. (Zhou & George, 2001, p. 683)

Building on the previous definitions, a comprehensive definition of job creativity can be proposed as follows:

Job creativity is the individual or collective ability to generate new and effective ideas that contribute to improving work and enhancing performance within the organization. It involves constructive interaction with the organizational environment and the provision of unconventional solutions to professional problems, ultimately enhancing competitiveness and institutional excellence.

2-5 Characteristics and Types of Job Creativity

2-5-1 Characteristics of Job Creativity:

Job creativity is distinguished by several key characteristics that determine its effectiveness and value within organizations. The most notable of these characteristics include:

- Originality:

This characteristic is reflected in the generation of ideas that are new, unique, and not derived from conventional or routine solutions. Originality is considered one of the most prominent indicators of creative thinking. (Runco & Jaeger, 2012, p. 94)

- Fluency:

This refers to the ability to generate a large number of ideas in a short period of time. It is a measure of the quantity of creative output. (Guilford, 1967, p. 87)

- Flexibility:

This refers to an individual's ability to adapt to different situations and view a problem from multiple perspectives. (Torrance, 1974, p. 22)

- Elaboration:

This is the ability to develop an initial idea and transform it into a comprehensive, practical form. (Guilford, 1967, p. 88)

- Practical Value:

A creative idea is not only required to be new, but it must also be feasible and offer real value within the organizational context. (Amabile T. , 1996, p. 35)

- Intrinsic Motivation:

Creativity largely depends on an individual's internal desire for achievement, rather than relying on external incentives. (Amabile T. , 1996, p. 105)

2-6 Types of Job Creativity:

Job creativity takes various forms depending on the organizational context, and it can be classified into:

Individual Creativity:

This refers to the individual's ability to develop new ideas based on their own experiences and knowledge.. (Amabile T. , 1996, p. 14)

- **Group Creativity:**

This arises from the interaction of individuals within work teams, allowing the integration of multiple perspectives and the development of innovative solutions. (Paulus & Nijstad, 2003, p. 6)

- **Technical Creativity:**

This relates to the innovation of new technologies or the improvement of technical and production processes.. (Shalley & Gilson, 2004, p. 34)

- **Administrative Creativity:**

This is reflected in redesigning organizational structures or developing new policies for resource management. (Zhou & George, 2001, p. 683)

- **Strategic Creativity:**

This refers to forward-thinking in reshaping the organization's major directions, such as entering new markets or redefining the business model.. (Ford, , 1996, p. 1113)

2-7 The Relationship Between Self-Efficacy and Job Creativity

Self-efficacy is one of the fundamental psychological and behavioral concepts that influence individual performance and behavior in the workplace, particularly in their ability to engage with complex situations and new challenges. Researchers have paid special attention to how self-efficacy impacts creativity, as creativity requires the courage to try new solutions, tolerate ambiguity, and take risks.

This directly affects initiative, perseverance, and flexibility in the face of challenges, all of which are essential elements for the emergence of creativity.

2-7-1 Self-Efficacy as a Psychological Determinant of Creativity

Many studies indicate that individuals with high self-efficacy tend to:

- Experiment with new problem-solving approaches.
- Resist pressure and challenges more effectively.
- Maintain a high level of intrinsic motivation.

Tierney & Farmer (2002) demonstrated in their study that creative self-efficacy is directly linked to the level of perceived creativity in the workplace.(Tierney & Farmer, 2002, p. 1142). The more an individual believes in their ability to be creative, the higher the likelihood that they will exhibit actual creative behavior.

2-7-2 Psychological Mechanisms Explaining the Relationship

Self-efficacy enhances creativity through several psychological mechanisms:

- **Self-Motivation:**

Individuals who believe in their ability to succeed tend to put in more effort.. (Bandura, 1997, p. 39)

- **Managing Fear of Failure:**

Self-efficacy reduces anxiety related to trying and failing, which creates space for experimenting with new ideas., (Tierney & Farmer, 2002, p. 584)

- **Positive Cognition:**

Individuals with high self-efficacy view obstacles as opportunities for learning, rather than as barriers..(Bandura, 1997, p. 77)

2-7-3 Empirical Evidence on the Relationship Between Self-Efficacy and Creativity

In a study conducted by Gong, Huang, & Farh (2009), it was found that creative self-efficacy

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

positively influences creative behavior by enhancing cognitive motivation and work engagement.(Gon, Huang, & Farh, 2009, p. 765)

The study by Carmeli & Schaubroeck (2007) also demonstrated that self-efficacy impacts an employee's ability to handle unfamiliar and ambiguous situations, which provides a fertile environment for creativity to emerge.(Carmeli & Schaubroeck, 2007, p. 36)

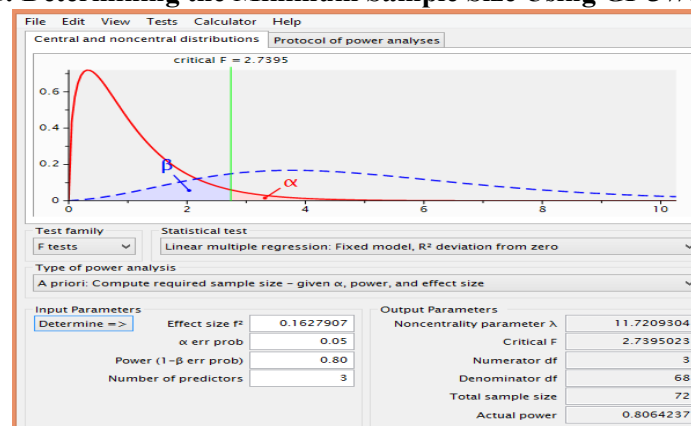
Thus, the literature confirms that self-efficacy is a crucial psychological factor in enhancing creative behavior within organizations. Individuals with high self-efficacy exhibit a greater willingness to embrace ambiguity, explore alternatives, and take intellectual responsibility - elements that are essential in contemporary work environments that demand continuous innovation and renewal.

3- Field Study:

3-1 Study Population and Sample:

The study population consists of employees of the National Company of Electricity and Gas (SONELGAZ) across all its branches in the Guelma province. The selected sample for this study included 75 individuals. This number was determined based on the G*POWER program, which indicated that the minimum required sample size for conducting the test is 72 individuals (total sample size = 72), assuming a high effect size and a statistical power of 95%.

Figure 01: Determining the Minimum Sample Size Using GPOWER Software



Source: Software Output (GPOWER)

3-2 Study Instrument:

A structured questionnaire was specifically developed for the purposes of this study. It was divided into two main sections: the first gathered demographic and personal information about the respondents, while the second focused on the core themes of the study. This latter section comprised three main axes, each broken down into dimensions, with each dimension consisting of five statements:

- **The first axis**, titled *Job Creativity*, included four dimensions, encompassing a total of twenty (20) statements.
- **The second axis**, under the title *Administrative Empowerment*, comprised three dimensions, distributed across fifteen (15) statements.
- **The third axis**, labeled *Self-Efficacy*, was made up of two dimensions, each containing a set of statements totaling ten (10) in all.

A five-point Likert scale was employed to assess the respondents' level of agreement with the questionnaire items, as follows:

Table (01): Coding of the study questionnaire response scale according to the Likert scale.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5
1.80-1	2.60-1.80	3.40-2.60	4.20-3.40	5-4.20

Source: Prepared by the researchers.

3-3 Reliability Testing of the Study Instrument:

The reliability of the study instrument was assessed using both Cronbach's Alpha coefficient and the Split-Half method. The results, as presented in the table, indicate a high level of reliability. Cronbach's Alpha reached a value of 0.86, which is considered high and very acceptable in social and behavioral research. Furthermore, the results of the split-half test showed that the Spearman-Brown correlation coefficient and the Guttman coefficient were 0.76 and 0.79, respectively—both exceeding the minimum acceptable threshold of 0.60. These findings reinforce the credibility and reliability of the instrument used for data collection.

Table (02): Results of the Study Instrument Reliability Test

Cronbach's Alpha Method	Split-Half Method	
Cronbach's Alpha Coefficient	Spearman-Brown Coefficient	Guttman Coefficient
0.86	0.76	0.79

Source: Prepared by the researchers based on the outputs of SPSS 27 software.

3-4 Descriptive Analysis of the Study Sample:

The table shows that the most represented age group in the sample is the over 40 years category, with 33.33%, followed by the 30 to less than 40 years group at 36.00%, and then the under 30 years group at 30.67%. This indicates a relatively balanced age distribution, with a slight tendency towards older age groups, which may reflect diverse and significant professional experiences among the sample members.

In terms of gender, it is observed that males make up the majority of the sample at 56.00%, compared to 44.00% for females. This suggests a slight male dominance in the composition of the sample, which is a common phenomenon in certain economic institutions, particularly in technical or financial departments.

Regarding educational level, the majority of the sample members hold a university degree, accounting for 56.00%, followed by those with a high school education at 33.33%. Those with graduate-level education represent only 10.67%. This distribution reflects a good level of educational qualifications among the sample, with a smaller proportion of highly specialized and advanced academic competencies.

As for professional experience, the data shows that 44.00% of the participants have 6 to 10 years of experience, which is the dominant group. This is followed by those with less than 5 years of experience at 24.00%, and those with more than 10 years at 32.00%. This indicates that most of the sample belongs to a group with moderate experience, enhancing their ability to offer accurate insights based on considerable practical experience.

In terms of job position, it appears that the majority of the sample hold the position of accountant, making up a significant 60.00%, followed by administrative employees at 18.67%, then specialized technical workers at 12.00%, and finally department managers at 9.33%. This

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

reflects a focus on the financial and administrative categories, which often align with the nature of economic or organizational topics.

Table 03: Percentage Distribution of Sample Members According to Demographic Data

Age	%	Gender	%	Education Level	%	Years of Experience	%	Job Position	%
Less than 30 years	30.67 %	Male	56.00 %	Secondary	33.33 %	Less than 5 years	24.00 %	Department Manager	9.33 %
From 30 to less than 40 yrs	36.00 %	Female	44.00 %	University	56.00 %	From 6 to 10 years	44.00 %	Accountant	60.00 %
More than 40 years	33.33 %			Postgraduate Studies	10.67 %	More than 10 years	32.00 %	Administrative Staff	18.67 %
								Technical Specialist	12.00 %

Source: Prepared by the researchers based on SPSS 27 outputs.

3-5 Analysis of Model Quality Indicators:

3-5-1 Convergent Validity:

The results indicate that the Average Variance Extracted (AVE) for all dimensions exceeds the benchmark value of 0.50, reflecting a good level of shared variance among the indicators. Additionally, the Composite Reliability (CR) values are all above 0.70, which signifies that the constructs demonstrate acceptable internal reliability from a statistical standpoint. Furthermore, both Cronbach's Alpha and Jöreskog's Rho coefficients surpass the accepted threshold of 0.70, indicating a high level of internal consistency among the indicators comprising each latent variable.

As for the Common Variance Indicator (LVI), all values fall within the acceptable range of [0.5–2], supporting the validity of the model's structural design. It is also worth noting that all factor loadings exceed 0.70, which further reinforces the construct validity of the measurement model.

Based on the above, it can be concluded that the model used to measure the variables demonstrates a good level of validity and reliability.

Table (04) presents the indicators of convergent validity.

Latent Variables	Average Variance Extracted (AVE)	Composite Reliability (CR)	Cronbach's Alpha	Rho De Jöreskog	LVI
Job Creativity	0.723	0.812	0.896	0.842	4.087
Administrative Empowerment	0.822	0.875	0.911	0.793	3.871
Self-Efficacy	0.751	0.902	0.873	0.843	3.550

Source: Prepared by the researchers based on SmartPLS3 outputs.

3-5-2 Discriminant Validity:

The table above clearly shows that all discriminant validity coefficients are statistically significant and acceptable. This conclusion is based on the analysis of the diagonal values in the correlation matrix. Specifically, each variable's value at the intersection with itself (i.e., along the main diagonal of the matrix) is noticeably higher than its correlations with other variables. This indicates that each latent variable is distinct from the others within the model.

The differences in these values reflect a clear separation among the latent constructs, confirming that each variable effectively measures its intended theoretical dimension or conceptual structure. Accordingly, these findings support the presence of discriminant validity among the studied variables and affirm the absence of conceptual overlap or redundancy between them.

Table (05) presents the indicators of discriminant validity.

Latent Variables	Job Creativity	Administrative Empowerment	Self-Efficacy
Job Creativity	0.903		
Administrative Empowerment	0.775	0.846	
Self-Efficacy	0.712	0.731	0.818

Source: Prepared by the researchers based on SmartPLS3 outputs.

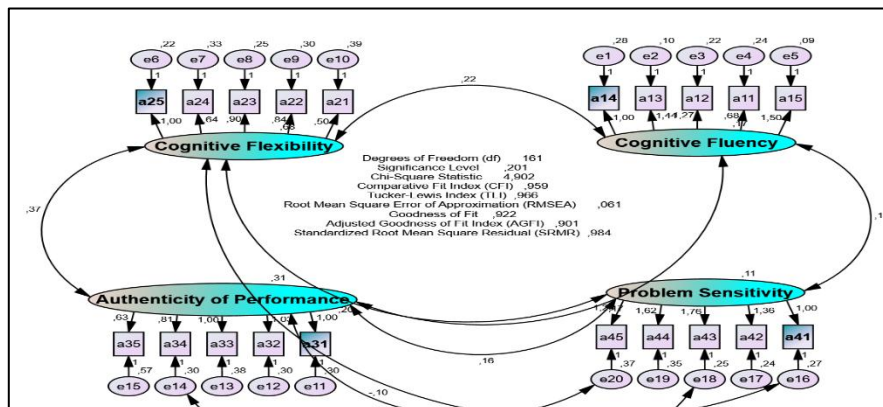
3-5-3 Factorial Validity:

The aim of this analysis is to break down the measured attribute into its basic components in order to verify its ability to measure the concept for which it was designed. To achieve this, Confirmatory Factor Analysis (CFA) was used to assess the construct validity of the research tools. The results yielded the following:

3-5-3-1 Factorial Validity Test for the First Dimension (Job Creativity)

The figure above shows a good model fit according to the indicators used. The Chi-Square value ($p = 0.201$) is not statistically significant, indicating that the differences between the theoretical model and the actual data are not large. Additionally, the values of CFI and TLI exceed 0.95, suggesting that the model explains the data well. The RMSEA value (0.061) is within the acceptable range, indicating good model fit. Moreover, the values of GFI and AGFI exceed 0.90, reflecting the quality of the model. Although the SRMR value is slightly higher (0.984) compared to the ideal value, other indicators support the robustness of the model. Regarding the dimensions, "Cognitive Flexibility" shows acceptable factor loadings, and similarly, "Cognitive Fluency," "Performance Originality," and "Problem Sensitivity" are considered strong components of the model.

Figure (02): Confirmatory Factor Analysis for the Dimension of Job Creativity



Source: AMOS Software

3-5-3-2 Factorial Validity Test for the Second Dimension (Administrative Empowerment)

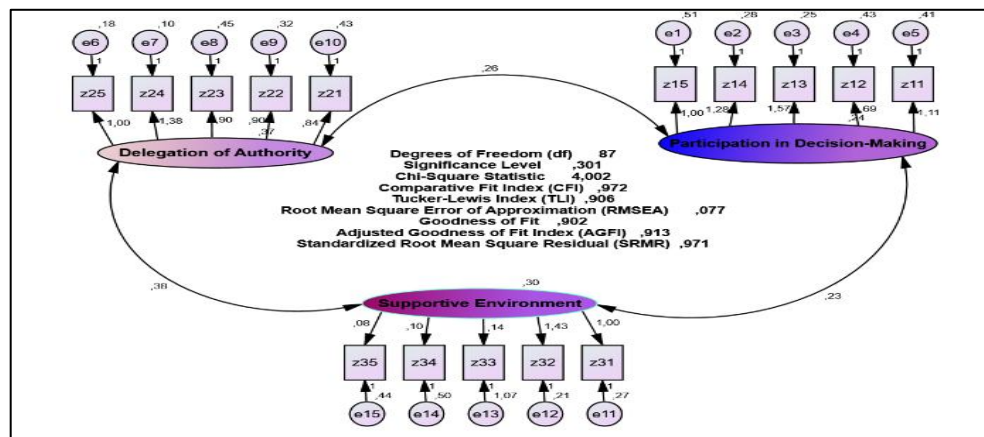
The model demonstrates good fit indices, as evidenced by the Comparative Fit Index (CFI = 0.972) and the Tucker-Lewis Index (TLI = 0.906), both indicating a strong model fit. The RMSEA value (0.077) also falls within the acceptable range. All factors are statistically significantly correlated with one another, and it appears that a "Supportive Environment" plays

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

a central role in enhancing "Participation in Decision-Making" through its relationship with "Delegation of Authority."

The model reflects a coherent conceptual structure suitable for testing hypotheses within an organizational or educational work environment. Overall, the quality of the model supports its appropriateness for data analysis and the derivation of meaningful conclusions.

Figure (03): Confirmatory Factor Analysis for the Dimension of Administrative Empowerment,



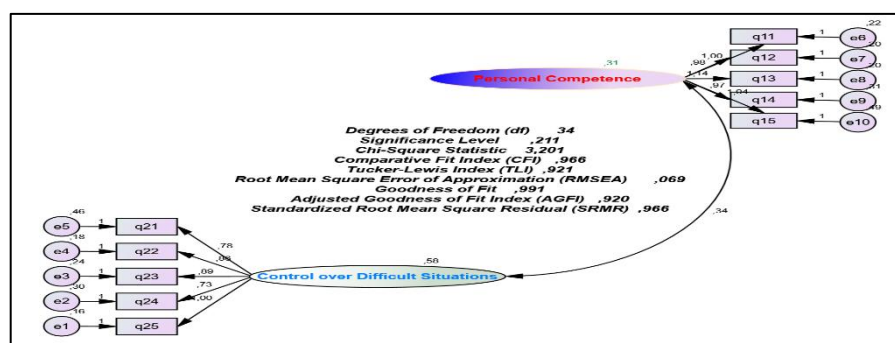
Source: AMOS Software

3-5-3-3 Factorial Validity Test for the Third Dimension (Self-Efficacy)

Based on the figure and a set of behavioral indicators associated with each dimension, the model demonstrates a strong fit, as reflected in the fit indices: CFI = 0.966, TLI = 0.921, and RMSEA = 0.069. These values indicate a good match between the model and the actual data. Additionally, the correlation between the two latent variables is relatively strong (0.34), suggesting that an enhanced sense of personal competence is associated with an individual's ability to manage difficult situations.

The model reflects a robust conceptual structure that holds significance in the field of positive psychology or resilience studies. It also shows that the measured elements accurately represent the theoretical constructs of both variables.

Figure (04): Confirmatory Factor Analysis for the Dimension of Self-Efficacy



Source: AMOS Software

3-6 Analysis of Participants' Opinions on the Study Dimensions:

• First Dimension: Administrative Empowerment

Participants expressed agreement with statements related to administrative empowerment, especially those concerning "delegation of authority" and "freedom in decision-making." This

suggests a relative level of trust from management in employees' abilities, which has enhanced the sense of empowerment among many of them. Statements such as "management gives us the opportunity to express our opinions" also received a high level of approval, indicating a degree of managerial openness.

- **Second Dimension: Self-Efficacy**

Responses showed a strong tendency toward strong agreement on this dimension, particularly with statements addressing "the employee's confidence in overcoming challenges" and "their ability to achieve professional goals." This reflects a good level of self-efficacy among employees, likely stemming from previous successful experiences or consistent managerial support that fosters independence and self-confidence.

- **Third Dimension: Job Creativity**

Most responses in this dimension also fell within the categories of agreement and strong agreement, especially for statements highlighting "the employee's ability to propose new solutions to problems" and "their desire to continuously improve work methods." This reflects a work environment that encourages innovative thinking and embraces new ideas—likely due to a supportive managerial climate or an organizational culture that values creativity.

Table (06): Descriptive Statistics of the Study Dimensions Based on Participants' Responses

Dimensions	Mean	Standard Deviation	Sample Opinion
Job Creativity	3.75	0.12	Agree
Administrative Empowerment	4.88	0.43	Strongly Agree
Self-Efficacy	3.91	0.60	Agree

Source: Prepared by the researchers based on SPSS.27 outputs.

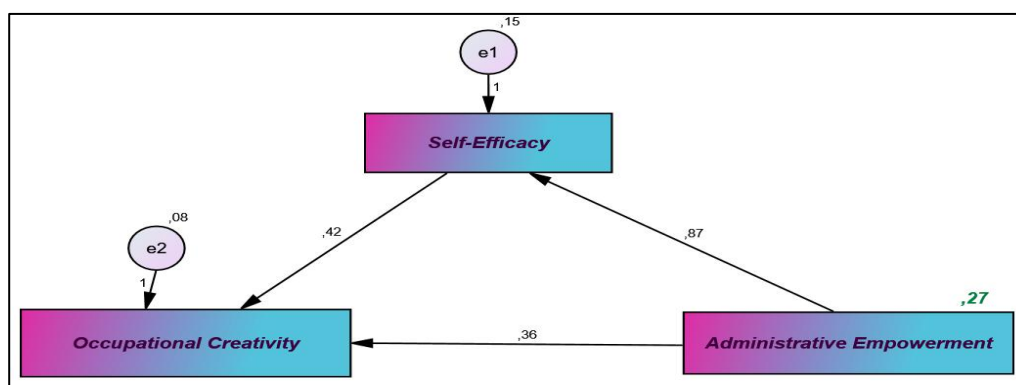
3-7 Testing the Direct and Indirect Effects of Study Variables (Mediating Relationship):

3-7-1 Estimation of the Study Model

The model depicted in the figure illustrates a triadic relationship between Administrative Empowerment and Job Creativity, with Self-Efficacy acting as a mediating variable. The direct path from Administrative Empowerment to Job Creativity (value = 0.36) indicates a positive direct effect. Additionally, Self-Efficacy plays a partial mediating role, as it is significantly associated with Administrative Empowerment (0.87) and, in turn, positively influences Job Creativity (0.42).

This suggests that Self-Efficacy enhances the effect of Administrative Empowerment on Job Creativity, highlighting the importance of self-confidence in activating individuals' creative potential within work environments that promote empowerment. The model demonstrates good theoretical coherence and supports the hypothesis that the interaction between psychological and organizational factors leads to innovative professional outcomes.

Figure (05): Direct and Indirect Effect Coefficients Between the Study Variables



Source: AMOS Software

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

3-7-2 Model Significance Test:

The results presented in the table indicate statistically significant relationships among the three variables: Administrative Empowerment, Self-Efficacy, and Job Creativity. Administrative Empowerment has a strong and direct effect on Self-Efficacy, with a path coefficient of (0.873), which is highly significant ($P < 0.001$). In turn, Self-Efficacy positively influences Job Creativity with a coefficient of (0.418). Additionally, Administrative Empowerment also exerts a direct effect on Job Creativity with a coefficient of (0.363), both effects being highly significant.

These findings confirm that Self-Efficacy plays a mediating role between Administrative Empowerment and Job Creativity, while Administrative Empowerment retains a direct influence as well—indicating a partial mediation model. As for variances, the estimated values for the latent variables (e.g., e1 and e2) are acceptable and statistically significant, reflecting a statistically stable model.

Table (07): Regression Weights, Standard Error, and Significance Level for the Effect of Administrative Empowerment on Job Creativity with Self-Efficacy as a Mediating Variable

Dimensions	Path	Dimensions	Estimate	S.E.	C.R.	P
Self-Efficacy	<---	Administrative Empowerment	,873	,062	14,187	***
Occupational CreativitySelf-Efficacy	<---	Self-Efficacy	,418	,060	6,959	***
Occupational CreativitySelf-Efficacy	<---	Administrative Empowerment	,363	,069	5,240	***

Source: Prepared by the researchers based on AMOS outputs.

Table (08): Regression Weights, Standard Error, Significance Level, and Covariance for the Independent Variable: Administrative Empowerment

Independent Variable	Estimate	S.E.	C.R.	P
Administrative Empowerment	,271	,031	8,631	***
e1	,153	,018	8,631	***
e2	,082	,010	8,631	***

Source: Prepared by the researchers based on AMOS outputs.

3-7-3 Sobel Test for Mediating Variable Significance

Based on the Sobel test, all results related to the mediating variable were found to be statistically significant, supporting the hypothesis that the mediating variable plays a meaningful role in the relationship between the studied variables. Once the significance of the mediating variable was confirmed, the results were further analyzed using the regression weights table, standard error, and significance level of the effect of *Administrative Empowerment* on *Job Creativity* in the presence of the mediating variable (*Self-Efficacy*).

It was found that Administrative Empowerment directly affects Job Creativity with a coefficient of 0.360 in the absence of the mediating variable. However, this direct effect is considered relatively weak, as Administrative Empowerment alone is not sufficient to fully stimulate Job Creativity. Additional factors—such as Self-Efficacy—are necessary to strengthen this impact.

When the mediating variable (*Self-Efficacy*) is introduced, the indirect effect of Administrative Empowerment on Job Creativity is calculated by multiplying the effect of Administrative Empowerment on Self-Efficacy by the effect of Self-Efficacy on Job Creativity and employee performance. This highlights the crucial role of Self-Efficacy in enhancing the influence of empowerment on creative performance.

$0.873 * 0.418 = 0.364$

Table (09): Sobel Test for Mediator Significance

Input:		Test statistic:	Std. Error:	p-value:
a	0.873	Sobel test: 6.24418665	0.0584406	0
b	0.418	Aroian test: 6.23157462	0.05855888	0
s _a	0.062	Goodman test: 6.25687557	0.05832208	0
s _b	0.060	Reset all	Calculate	

Input:		Test statistic:	p-value:
t _a	6.24418665	Sobel test: 4.41084094	0.0000103
t _b	6.23157462	Aroian test: 4.38277201	0.00001172
		Goodman test: 4.43945616	0.00000902
		Reset all	Calculate

Source: <http://quantpsy.org/sobel/sobel.htm>

Conclusion:

In the face of organizational transformations and the increasing challenges faced by contemporary institutions, the enhancement of job creativity has become one of the central issues that attract the attention of leaders and administrative planners. Job creativity serves as a strategic lever for improving overall performance and ensuring sustainability and adaptability. From this perspective, this study aimed to analyze the relationship between administrative empowerment as an independent variable, job creativity as a dependent variable, and the role of self-efficacy as a mediating variable within a real working environment, specifically the National Electricity and Gas Company.

Theoretically, the study was based on the fundamental hypothesis that administrative empowerment does not necessarily lead to creativity unless it is accompanied by a sense of internal competence and self-control in the employee. This is reinforced by the concept of self-efficacy proposed by Bandura, which refers to an individual's belief in their ability to control their behavior and direct it toward achieving goals. Consequently, the relationship between empowerment and creativity is not linear, but rather mediated through psychological inputs that activate self-motivation and support the translation of organizational resources into tangible innovative behaviors.

This concept was tested using Structural Equation Modeling (SEM) methodology, as it provides accurate tools for analyzing the complex relationships between latent and measured variables and revealing both direct and indirect effects in the study. The analysis led to a set of results that represent a scientific and practical contribution to understanding the dynamics of interaction within the Algerian work environment.

Study Results:

- The results of the model showed a statistically significant positive direct relationship between administrative empowerment and job creativity, reinforcing the basic hypothesis that empowerment practices contribute to stimulating creative behavior within the institution.

The Mediating Role of Self-Efficacy in the Impact of Administrative Empowerment on Job Creativity: An Analysis Using Structural Equation Modeling – A Case Study of the National Electricity and Gas Company

- The results indicated that self-efficacy plays a partial mediating role, meaning that administrative empowerment influences creativity both directly and indirectly through self-efficacy, emphasizing the importance of the psychological dimension in explaining organizational behavior.
- The goodness-of-fit indicators for the overall model were excellent (CFI = 0.959, TLI = 0.966, RMSEA = 0.061), demonstrating the alignment of the proposed theoretical model with the field data and supporting the validity of the interpretation.
- The direct effect of administrative empowerment on job creativity was relatively weak (0.360) in the absence of the mediator variable, reflecting that empowerment alone is insufficient and requires internal activation through self-confidence.
- When self-efficacy was included, a relatively strong indirect effect emerged, proving that self-efficacy is a key driver that transforms empowerment into tangible creative behavior.
- The responses from the sample participants showed general agreement with the presence of empowerment practices and self-efficacy, with most responses ranging from agreement to strong agreement, indicating a positive perception of the relationship between the studied dimensions.
- The model's results highlighted the importance of individual psychological factors in supporting organizational efforts, suggesting a call for adopting integrated approaches that consider the personal dimension within institutional development frameworks.

Recommendations:

- The need to adopt a strategic approach to employee empowerment that involves them in decision-making and provides an inspiring and safe organizational environment for initiative.
- Investing in the development of self-efficacy through psychological support programs, professional counseling, and training focused on enhancing competence and self-confidence.
- Fostering an organizational culture based on creativity and experimentation by providing both moral and material incentives for new ideas and accepting failure as part of the innovation process.
- Incorporating self-efficacy indicators into performance evaluation systems to measure employees' readiness to face challenges and offer new solutions.
- Expanding the use of SEM methodology in future administrative studies due to its strength in testing causal models and complex mediating relationships.
- Expanding similar applied studies across different institutions (both public and private) to verify the model's applicability in diverse environments and contexts.
- Encouraging decision-makers at the National Electricity and Gas Company to benefit from the results of this study in shaping human resources policies and activating career pathways that integrate empowerment, psychological support, and rewards for creativity.

Bibliography List:

1. A Carmeli و J Schaubroeck .(2007) .The influence of leaders' and other referents' normative expectations on individual involvement in creative work . *.The Leadership Quarterly*, 18.48–35 ,(1)
2. Amabile, T. (1983). The social psychology of creativity: A componential conceptualization. *.. Journal of Personality and Social Psychology*, 45(2), 357–376.

3. Amabile, T. (1996). *Creativity in context*. Boulder, CO: Westview Press.
4. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: .: Freeman.
5. Bowen, D., & Lawler, E. (1992). The empowerment of service workers: What, why, how, and when. ., *Sloan Management Review*, 33(3), 31–39.
6. Ford, , C. (1996). A theory of individual creative action in multiple social domains. ., *Academy of Management Review*, 21(4), 1112–1142.
7. Guilford, J. (1967). *The Nature of Human Intelligence*. New York: McGraw-Hill.
8. J. A Conger و ‘R. N Kanungo .(1988) .The empowerment process: Integrating theory and practice .*Academy of Management Review*, 13.482–471 ‘(3)
9. Oldham, G., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of Management Journal*, 39(3), 607–634.
10. Pajares, F. (2002). *Overview of social cognitive theory and of self-efficacy*. Récupéré sur Emory University.: <http://www.uky.edu/~eushe2/Pajares/eff.html>
11. Paulus, P., & Nijstad, B. (2003). *Group Creativity: Innovation through Collaboration*. Oxford University Press.
12. Robbins, S., & Coulter, M. (2018). *Management (14th ed.)*. Pearson.
13. Runco, M. A., & Jaeger, G. J. (2012). The standard definition of creativity. *Creativity Research Journal*, 24(1), 92–96.
14. Schunk, D. H. (1991). Self-efficacy and academic motivation. *Educational Psychologist*, 26(3-4), 207–231.
15. Shalley, C., & Gilson, L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly* 15(1), 33–53.
16. Spreitzer, G. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5),, 1442–1465.
17. Stajkovic, A., & Luthans, F. (1998). Self-efficacy and work-related performance: A meta-analysis. *Psychological Bulletin*, 124(2), 240–261.
18. Thomas, K. W., & Velthouse, B. (1990). Cognitive elements of empowerment: An “interpretive” model of intrinsic task motivation. ., *Academy of Management Review*, 15(4), 666–681.
19. Tierney, P., & Farmer, S. (2002). Creative self-efficacy: Its potential antecedents and relationship to creative performance. *Academy of Management Journal*, 45(6), 1137–1148.
20. Torrance, E. (1974). *Torrance Tests of Creative Thinking: Norms-Technical Manual*. Scholastic Testing Service.
21. Woodman, R., Sawye, J., & Griffin, , R. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18(2), 293–321.
22. Y Gon و J. C Huang و J.L Farh .(2009) .Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy .*Academy of Management Journal*, 52.778–765 ‘(4)
23. Yukl, G. (2013). *Leadership in Organizations (8th ed.)*. Pearson.
24. Zhou, J., & George, J. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. . *Academy of Management Journal*, 44(4),, 682–696.