

## Flexible work environments in enhancing creativity and innovation within emerging projects in Saudi companies

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### ABSTRACT

#### Article history:

Received June 22, 2025

Received in revised format July 28, 2025

Accepted August 11 2025

Available online

August 11 2025

#### Keywords:

Flexibility

Work environment

Creativity

Innovation

Startups

Entrepreneurship

Kingdom of Saudi Arabia

This study aims to explore the role of workplace flexibility in promoting creativity and innovation within emerging entrepreneurial projects in Saudi companies. The study adopted a descriptive approach to data analysis and used a questionnaire to collect data from a sample of (120) participants working in emerging entrepreneurial projects. The study included two axes (workplace flexibility and creativity and innovation). The results showed a high level of workplace flexibility among the study sample and a high level of creativity and innovation. Analyses revealed a positive relationship between workplace flexibility and creativity and innovation, indicating that providing a flexible work environment contributes to promoting creative behaviors within emerging entrepreneurial projects. The results did not reveal statistically significant differences in participants' responses attributable to demographic variables (job title, age of the entrepreneurial project, number of years of experience), which supports the generalizability of the results. The study presented a number of practical recommendations, most notably the adoption of flexible workplace policies and the development of work environments that stimulate innovation, which supports the success of entrepreneurial projects in the Kingdom of Saudi Arabia.

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## 1. Introduction

In light of the economic and social transformations taking place in the Kingdom of Saudi Arabia, especially as it moves toward achieving the goals of Vision 2030, it has become imperative to adopt modern business models that enhance startups' ability to innovate and create. Flexible work environments are among the most prominent of these models, as they allow employees greater freedom in how, where, and when they work, contributing to improved performance and increased job satisfaction.

Flexible work environments generally refer to flexibility in terms of both spatial (where work is performed) and temporal (when work is performed), as Rau and Hyland (2002) explained. These arrangements have become common in industrialized countries, particularly in Europe and the United States. For example, data from the U.S. Department of Labor indicated that by the end of the 20th century, approximately 27% of full-time employees had some degree of flexibility in their working hours, while nearly 50% of employees had the ability to telecommute. The experience of the Chinese company Ctrip showed that working from home increased employee performance by 13%, improved job satisfaction, and reduced employee turnover by 50% (Bloom *et al.*, 2015). With the development of digital tools and electronic work systems, it has become possible to overcome the spatial and temporal constraints imposed by traditional work patterns, and the work tools required to implement flexible work environments have become more mature and widespread. Flexible work arrangements have thus become a trend adopted by organizations to keep pace with the competitive and dynamic environment and stimulate employee motivation.

Studies in developed countries have addressed the topic of flexible work arrangements from several perspectives, such as their determinants and their impact mechanisms and outcomes. These studies approached flexible work environments from three main perspectives. First, they focused on understanding the different types of flexible work environments, such as flexibility

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in time, location, and work content, as these are important in clarifying the theoretical implications of flexible work environments as a management system (Thompson *et al.*, 2015). Second, they looked from the employee's perspective, examining demographic characteristics as antecedent factors of flexible work environments, in addition to employee behavioral outcomes. Most of these studies found that employees view flexible work environments positively and achieve positive outcomes because of it. For example, Ziderman (2020) demonstrated that flexible work environments positively impact employee satisfaction and motivation, while Chung and van der Lippe (2020) concluded that flexible work environments promote work-life balance. Third, studies have examined flexible work environments from an organizational perspective, examining organizational antecedents such as organizational culture characteristics and its organizational outcomes such as performance and competitiveness (Tatoglu, 2020). However, the results of these studies have shown that flexible work environments as a design model in the workplace is complex and difficult to analyze. For example, Ter-Hoeven and Zoonen (2015) asserted that flexible work environments bring both benefits and challenges with regard to employee well-being and organizational performance (Rubery *et al.*, 2016). Most previous studies focus on the meaning and impact of flexible work environments as a management system in the workplace. A growing number of researchers have begun to pay attention to its role in motivating employees and enhancing organizational competitiveness (Peretz *et al.*, 2018). Some studies have shown that a flexible and autonomous work environment can motivate employees to invest more resources and capabilities in innovation (Wallace *et al.*, 2016). However, existing research has not sufficiently clarified how flexible work environments activates innovative behaviors among employees, especially those classified as "knowledge workers," who are considered the primary drivers of innovation. Therefore, it remains unclear whether the temporal and spatial flexibility of flexible work environments encourage these employees to engage more effectively in innovative work activities. Accordingly, this study aims to explore the role of flexible work environments in enhancing creativity and innovation in emerging entrepreneurial projects in Saudi companies, based on Self-determination theory, which states that an individual's surrounding environment can enhance their sense of independence and competence, which increases their intrinsic motivation and helps transform external motivation into internal motivation (Jiang *et al.*, 2023).

### 1.1 Research Problem and Questions

Entrepreneurial companies in the Kingdom of Saudi Arabia strive to achieve excellence and innovation within rapidly changing competitive environments. However, many of them still rely on traditional work organization methods, which may limit the exploitation of employees' creative potential. Therefore, the study seeks to address the following primary question: What is the role of work environment flexibility in influencing the level of creativity and innovation in emerging entrepreneurial projects within Saudi companies? From this question, the following sub-questions emerge:

- What is the level of work environment flexibility in emerging entrepreneurial projects in Saudi companies?
- What is the level of creativity and innovation in emerging entrepreneurial projects in Saudi companies?
- Are there statistically significant differences between the average responses of participants regarding the relationship between work environment flexibility, creativity, and innovation attributable to the variables of job title, age of the entrepreneurial project, and number of years of experience?

### 1.2 The Significance of Research

The importance of the research lies in addressing the knowledge gap related to the relationship between flexible work environments and creativity in the Saudi context. This research theoretically contributes to expanding the understanding of the impact of Flexible work environments on innovation within knowledge jobs and uncovers a new psychological mechanism through "thriving at work" as a mediator. It also practically advocates for adopting Flexible work environments strategically, appropriate to the nature of the job, and enhancing it with innovation-supportive HR policies. This research also contributes to providing startup owners with effective approaches to building an organizational environment that stimulates innovation.

## 2. Literature review

### 2.1 Flexible Work Environment

A flexible work environment refers to arrangements and policies that allow employees a degree of freedom in determining their work location (such as working from home or from different locations) and working hours (such as flexible hours or part-time work), in line with the nature of their tasks and the organization's requirements. According to Rau and Hyland (2002), flexibility in the work environment primarily includes spatial (where work is performed) and temporal (when work is performed). This concept is part of modern human resource management trends that aim to enhance work-life balance, stimulate performance and creativity, while maintaining a high level of organizational productivity.

Recent observations indicate the growing popularity of flexible work models such as telecommuting, hybrid work, and flexible hours. As Davidescu *et al.*, (2020) point out, offering the option of part-time work reveals both positive and negative dimensions for employees. For example, these models may contribute to improving employee performance by enhancing work-life balance and increasing autonomy. However, they require effective management interventions to ensure their success. There are additional challenges to address, such as mental health issues, stress management, and the potential for harming organizational culture. Therefore, optimal use of technology, effective communication protocols, and an inclusive organizational culture can maximize the benefits of these models. Accordingly, the impact of a well-being model on employee

performance depends not only on the nature of the model itself, but also on how well it is implemented and managed within the organizational context (Warmate *et al.*, 2021).

### 2.2 Remote and Hybrid Work

This model relies on employees performing their work entirely outside of the traditional office environment. Numerous studies have shown that working from home contributes to increased productivity by eliminating commuting time and reducing distractions in the workplace. Despite these benefits, this model may face challenges, most notably the difficulty of collaboration between remote employees and the difficulty of separating personal and professional life, which can lead to an overload of work and decreased job satisfaction over time.

This model combines telecommuting and office-based work, aiming to achieve an optimal balance between personal and work-life demands. This arrangement provides employees with the flexibility to work remotely while maintaining face-to-face interaction when needed. According to Austin-Egole *et al.* (2020), the hybrid work model promotes work-life balance and can lead to increased employee happiness and productivity. However, it can also create some problems, such as inequality among employees, as those who work in the office may have greater exposure and networking opportunities than their colleagues who work remotely.

### 2.3 Flexible Hours

Flexible working hours contribute to improved employee performance by giving them the freedom to plan their work hours to suit their peak productivity times, as well as the ability to manage their personal affairs more flexibly. This leads to reduced stress levels and increased job satisfaction. However, excessive reliance on personal devices outside of a structured work environment can lead to coordination issues, communication failures, and negatively impact team dynamics and the security of shared projects (Loh & Cheng, 2024).

### 2.4 Flexible Work Environment and Creativity

Creativity is a fundamental element of social, cultural, economic, and technological progress, and contributes to the political and spiritual development of civilizations. Sternberg (2017) defines creativity as the production of an idea or product characterized by novelty, surprise, and high quality. These characteristics must be present in order for a product or individual to be considered truly creative. The creative process relies on the use of multiple productive functions, and the capabilities and available resources of the individuals involved play a significant role in generating new ideas (Burns *et al.*, 2015).

In the entrepreneurial context, creativity refers to the ability of entrepreneurs to combine disparate elements to produce entirely new or improved products, services, or practices, thereby adding real value to the market or business environment (Mumin *et al.*, 2013). Studies have shown that entrepreneurial creativity enhances entrepreneurial behavior and supports founders' psychological well-being (Wang *et al.*, 2021).

Several studies have demonstrated the importance of creativity in the emergence and continuity of businesses, especially in complex competitive environments. Despite widespread interest in the role of creativity in value creation, the factors influencing it still require further theoretical study (Mumin *et al.*, 2013). Some research has examined the relationship between personality traits and the conditions surrounding creativity, such as the impact of positive emotions on enhancing entrepreneurial creativity, the importance of individual traits such as curiosity, openness, and risk-taking (Tony *et al.*, 2014), and the role of mood in supporting creative thinking. Creative self-efficacy, i.e., an individual's belief in their ability to be creative, is strongly related to creative performance (Khedhaouria *et al.*, 2015). In conclusion, entrepreneurial creativity is one of the crucial factors in the success of start-up projects, and despite the great focus on its results, the factors that precede it still need deeper study, especially with its vital role in discovering resources, improving performance, and ensuring business sustainability (Mumin *et al.*, 2013).

### 2.5 Flexible Work Environment and Innovation

Companies' continued adherence to fixed-term work arrangements makes it difficult for their employees, especially knowledge-based employees, to organize their work schedules independently. These employees face difficulty in working due to their physiological conditions, personal needs, or family life (Piszczek & Pimputkar, 2021). Psychological stress also stems from the fact that employees in formal work settings are under constant supervision from managers. Individuals who suffer from physical and psychological fatigue or poor psychological state find it difficult to take initiative and become more creative. In contrast, flexible work arrangements provide a positive work environment and reduce conflict and stress at work (Yunus & Mostafa, 2021), encouraging employees to proactively invest resources such as time, attention, and energy in their job tasks. Flexible work arrangements significantly enhance their perception of an inclusive and flexible organizational environment and reduce their excessive and unnecessary consumption of psychological resources. According to some researchers, a comfortable and enjoyable work environment contributes to enhanced employee innovative performance (Siyal *et al.*, 2021). Flexible work arrangements provide employees with more freedom to set work schedules and choose work locations, which enhances work autonomy. They allow them to make their own decisions and allocate their resources. Therefore, the greater the power of an organization's employees, the greater the positive relationship between work autonomy and employee innovative performance (Gao *et al.*, 2020). Furthermore, these employees feel more responsible and engaged and are more willing to take on more tasks and responsibilities. Through their experience of work autonomy through flexible work

arrangements, knowledge workers enjoy greater autonomy in their work and a strong desire to improve their innovative performance (Jiang *et al.*, 2023).

### 2.5.1 *The Role of thriving at work*

Grzywacz *et al.* (2008) and Hill *et al.* (2008) found that perceived job flexibility is negatively related to stress and burnout, and that reducing stress enables employees to enjoy healthy physical and mental states (Bayighomog *et al.*, 2021). Thus, flexible work environments foster a strong sense of workplace thriving by reducing employee stress. The Spreitzer and Porath (2013) model clearly indicates that workplace thriving has two dimensions: learning and vitality, which are linked to innovation. When employees experience a sense of learning, this leads to positive development. Enrichment and advancement in their professional knowledge increase their confidence and creativity, encouraging them to push the status quo and implement new ideas at work. Similarly, when employees feel vital, they have greater energy and motivation to implement new ideas and may attempt career breakthroughs. Especially for knowledge workers, flexible work environments give them more autonomy to coordinate their jobs with other activities, helping them have more opportunities to learn and network. Additionally, they can more easily maintain high levels of vitality when they feel more in control of their working hours and locations. Consequently, they continue to thrive at work and exhibit more innovative behaviors, ultimately contributing to the organization's innovative development.

### 2.5.2 *The Effect of Human Resource Management Opportunities*

Knowledge workers' innovative behavior is built on the constant search for opportunities and inspiration to innovate. Human resource management policies and practices that facilitate these opportunities include job rotation, information sharing, employee engagement, teamwork, and fostering employee social networks both inside and outside the organization. Human resource management opportunities create more opportunities for knowledge flow and information sharing, facilitating innovation among knowledge workers (Jiang *et al.*, 2023). For example, job rotation can expose employees to new work environments and job content; information sharing can enable employees to acquire new knowledge; work engagement and teamwork foster innovation and collaboration among teams; and external interactions may contain new knowledge that inspires innovation. Therefore, in the presence of high-quality HR management opportunities, employees who thrive in the workplace may discover more possibilities for innovation. Additionally, HR management approaches that facilitate opportunities help create and maintain emotional bonds within the organization by enhancing communication and relationships among employees, making it easier for employees to receive support and assistance from their colleagues (Chuang *et al.*, 2016).

## 2.6 *Entrepreneurship and Startup Projects in Saudi Arabia*

Entrepreneurship has undergone a major transformation since the 17<sup>th</sup> century, moving from a focus on risk-taking for profit to its recognition as a critical factor in societal progress and economic development. Joseph's theory highlighted the transformative potential of entrepreneurship for economic development. Entrepreneurship is crucial in the modern era, particularly in Saudi Arabia, as it contributes to advancing innovation and diversifying the economy, in addition to addressing social issues such as poverty and unemployment. According to Jardim (2021), global environmental changes require entrepreneurs to possess creativity and innovation skills to create successful ventures. This ability to innovate is essential for economic growth, contributing to increased GDP, job creation, and the development of human capital. In a competitive and ever-changing business environment, entrepreneurs must continuously adapt and evolve to promote sustainable development and achieve long-term success. By embracing innovation, they can stimulate the economy, create new technologies, and enhance productivity, ultimately contributing to the advancement of society as a whole.

The impact of entrepreneurship on economic and social development in Saudi Arabia has been investigated in recent studies. Al-Ajlouni and Saad (2024) conducted a study focusing on entrepreneurial initiatives in the Northern Borders Region of Saudi Arabia. Their research demonstrated a strong, positive impact of entrepreneurship on economic and social development, with the strongest correlation being risk-taking. Additionally, Al-Manshid and Al-Sayed (2024) analyzed the relationship between sustainable development and entrepreneurship in Saudi Arabia from 2006 to 2022, finding that entrepreneurial activities positively impact economic growth, social development, and environmental sustainability, in line with the Saudi Vision 2030 initiative, using an autoregressive lagged model.

These findings underscore the importance of entrepreneurship in Saudi Arabia's efforts to diversify the economy, particularly in reducing dependence on hydrocarbon revenues. The International Monetary Fund (IMF) has recognized the ongoing economic transformation in Saudi Arabia and emphasized the importance of reforms aimed at increasing competitiveness and diversifying sources of income.

Entrepreneurs play a vital role in the efficient use of resources, delivering innovative products and services, and creating jobs, contributing to economic progress. Furthermore, entrepreneurship stimulates innovation by bringing innovative technologies and ideas to the market that improve the quality of life and well-being of society. Therefore, supporting and promoting entrepreneurship is essential to foster sustainable economic growth, innovation, and social development in Saudi Arabia. The study explores the role of Saudi Arabia in fostering entrepreneurship, particularly through Vision 2030, which places a strong emphasis on fostering entrepreneurial activities. This focus includes both tangible and intangible efforts, as well as initiatives

aimed at developing entrepreneurship and supporting small businesses. Saudi Arabia is actively seeking to diversify its economy to reduce its dependence on the oil sector, with a strong focus on the digital economy as a new source of revenue. The Kingdom ranks fourth among Arab countries and 45th globally in the Entrepreneurship Index, indicating a promising resurgence in entrepreneurial activity. While Saudi universities contribute to fostering entrepreneurship, there is a need for an innovation center to better support student initiatives through training and funding. Ultimately, entrepreneurship plays a vital role in Saudi Arabia's economic development strategy and Vision 2030.

Entrepreneurship is increasingly recognized as a critical factor in advancing sustainable development (Johnson, 2020). Entrepreneurs can implement innovative solutions and sustainable business models to address pressing social and environmental issues. For example, Kummitha (2019) examined the two-way relationship between entrepreneurship and smart cities, demonstrating how entrepreneurs use technology to transform urban environments into sustainable and energy-efficient ecosystems. Innovations such as renewable energy solutions, waste management systems, and smart infrastructure enhance quality of life while reducing environmental impact. Entrepreneurship and innovation are explicitly recognized as critical components of the Sustainable Development Goals (SDGs) in the 2030 Agenda for Sustainable Development. Vision 2030 prioritizes the global development of a knowledge economy, with entrepreneurship at its core, compared to previous development agendas that focused primarily on developed countries. According to a study by Khefasha and Belkacem (2016), their findings support the idea that entrepreneurial activity in the technology sector contributes to improving a country's long-term sustainability. This shift reflects the growing recognition of the role of entrepreneurship in promoting inclusive and equitable development. Entrepreneurs are uniquely positioned to create business models that focus on economic viability, social justice, and environmental conservation, thus contributing to narrowing the gap between economic development and sustainability. For example, social entrepreneurs often focus on solving societal problems, such as providing clean water, education, and healthcare, while simultaneously creating economic value (Esmail *et al.*, 2025).

### 2.7 Benefits and Challenges of Flexible Work Environments

There are many benefits to flexible work environments. Flexible work environments allow employees to customize their work schedules to meet personal commitments such as family responsibilities, education, or health needs, leading to significant increases in job satisfaction and reduced stress levels (Hackney *et al.*, 2022). This flexibility enables employees to work at their most productive times, reducing burnout and enhancing their overall well-being. As a result, employees become more motivated and engaged, feeling valued and supported by their organizations. This increase in morale and job satisfaction translates into increased productivity, as employees become more focused, efficient, and engaged in their tasks. Flexible work environments support individual employee needs and the overall success of the organization by promoting a healthy work-life balance.

Flexible working hours and telecommuting also allow employees to avoid long commutes, freeing up time and energy for other activities. According to Hensher *et al.*, (2022), the time saved from commuting is reallocated between paid or unpaid work and leisure or family activities. This reallocation boosts productivity for both businesses and the economy and enhances the physical and mental health of individuals. Furthermore, reduced commuting can reduce congestion during peak times, reinforcing the perceived benefits of commuting and separating work from personal life. These changes highlight the evolving nature of work and the need for continued research into their impacts on productivity and well-being.

Flexible work environments and remote work help remove geographical barriers, allowing organizations access to a wider range of global skills and expertise. According to Ardi *et al.*, (2024), this expanded access to talent enhances innovation and productivity within organizations. By diversifying the talent base, organizations can create a more dynamic and creative work environment, which fosters innovation and improves overall performance.

While flexible work environments offer flexibility, there are several challenges to flexible work environments, as they can lead to difficulties in communication and collaboration, especially when employees are in different time zones. As Jiang *et al.* (2023) noted, reliance on asynchronous communication can lead to delays and misunderstandings, slowing down the flow of information and coordination within teams. This results in delayed task completion and an increased likelihood of errors or misinterpretations, negatively impacting productivity. To maintain effective communication, it is essential for organizations to develop strategies to bridge the gaps created by remote work, ensuring smooth collaboration and effective information exchange.

The blurred boundaries between work and personal life, coupled with the constant expectation of availability, particularly in the IT industry, contribute to increased burnout. As Ajayi and Udeh (2024) noted, the rapid pace of technological change requires continuous learning and skill updating, further exacerbating the risk of burnout. Furthermore, long working hours, tight deadlines, and high job demands, particularly in project- or client-based roles, can lead to unrealistic expectations and work-life imbalance. Organizations must establish clear work-life boundaries, provide support for continuous learning, and create a supportive work environment to reduce burnout and promote a sustainable and productive workforce. In addition, supervising remote employees presents unique challenges, including ensuring psychological safety, accountability, and maintaining consistent work standards. The effectiveness of management practices varies among employees. To achieve this, clear communication, regular check-ins, and specific goal setting are essential to building trust and boosting productivity. Flexibility in supervision is also critical, as employees respond differently based on their circumstances. Maintaining consistent standards ensures fairness and supports the success of remote teams (Loh & Cheng, 2024).

### 3. Methodology

#### 3.1. Data Analysis and Study Results

Statistical Analysis of Study Data This chapter presents an analysis of the data collected from the study sample, which amounted to (120) participants working in emerging entrepreneurial projects within companies in the Kingdom of Saudi Arabia. The aim was to test the study hypotheses and answer the study questions. The data were analyzed using the statistical analysis program (SPSS - version 26), and processed according to statistical methods appropriate to the nature of each question.

This section includes the following analytical procedures:

- A preliminary data analysis to describe the sample characteristics, a data coding method for conducting statistical analysis, and determining the adopted assessment scale.
- A reliability analysis of the study instrument using Cronbach's alpha coefficient.
- A descriptive analysis of the study axes: the first axis, which includes (20) items, and the second axis, which includes (36) items.
- Answering the study's sub-questions through means and variance analysis. An analysis of the relationship between the two main axes.
- Testing statistically significant differences in participants' responses according to different demographic variables.
- Comparing the results with previous studies.

#### 3.2. Data Coding and Statistical Analysis Foundations

This section discusses the principles adopted in analyzing the data from the study tool (questionnaire), the statistical method used to handle the data, and the assessment scales used. Demographic data were coded as shown in Table 1.

**Table 1**  
Coding of Demographic Variables

Variable	Category	Code
Gender	Male	1
	Female	2
Job Title	Founder	1
	Co – Founder	2
	Employ	3
Age of the Entrepreneurial Project	< 1 year	1
	1 – 2 years	2
	3 – 4 years	3
	>= 5 years	4
Number of Years of Experience	<1 year	1
	1 – 4 years	2
	5 – 9 years	3
	>= years	4

The study assessed the level of the arithmetic mean and the standard deviations on the following classification shown in Table 2 as follows,

**Table 3**  
The descriptive level used in the survey

Score	Response Level	Mean Range	Descriptive Level
5	Strongly Agree	4.20 – 5.00	Very High
4	Agree	3.40 – 4.19	High
3	Neutral	2.60 – 3.39	Moderate
2	Disagree	1.80 – 2.59	Low
1	Strongly Disagree	1.00 – 1.79	Very Low

This classification was used for item analysis and axis analysis and for interpreting study participant trends.

#### 3.3. Demographic Characteristics of the Sample

In this section, the demographic characteristics of the (120) participants in the pilot projects emerging in Saudi Arabia will be presented. Data analyzed using the SPSS program using descriptive statistical methods frequency and percentages to determine the distribution of sample members by sex, job title, age of pilot project and number of years of experience.

**Table 3**  
Distribution of the Sample According to Gender

Gender	Frequency	Percentage (%)
Male	50	41.7%
Female	70	58.3%
<b>Total</b>	<b>120</b>	<b>100.0%</b>

As shown in Table 3, females accounted for the largest percentage of the study sample, with (70) participants at (58.3%) and males at (50) at (41.7%). This distribution reflects the high level of women's participation in entrepreneurial start-ups in Saudi Arabia, which is in line with the Saudi Vision 2030 orientation in enhancing women's role in the economy and empowering them in the entrepreneurial sector. This high female representation indicates increased interest by women in the entrepreneurial sector and in flexible environments that provide a balance between life and work, and this enhances their presence in such studies. Table 4 shows that the largest percentage of participants were founders, at (38.3%), followed by employees, at (37.5%), and then co-founders, at (24.2%), this distribution demonstrates the diversity of job positions within the entrepreneurial ventures and reflects the inclusiveness of the sample and its ability to represent diverse perspectives from within a single work environment, whether from founding leaders or working employees. The high percentage of employees and non-founding participants enhances the credibility of the data related to innovation, as they are often at the site of direct implementation and are effectively impacted by the flexibility of the work environment.

**Table 5**  
Distribution of the Sample According to Project Age

Project Age	Frequency	Percentage (%)
< 1 year	27	22.5
1 – 2 years	23	19.2
3 – 4 years	31	25.8
>= 5 years	39	32.5
<b>Total</b>	<b>120</b>	<b>100.0%</b>

Table 5 indicates that most participants work in entrepreneurial ventures that have been established for five years or more (32.5%), followed by ventures that are between three and four years old (25.8%), then ventures that are less than a year old (22.5%), and finally ventures that are between one and two years old (19.2%). The distribution reflects a significant representation of entrepreneurial ventures at different age levels, which allows for a diversity of perspectives on the impact of work environment flexibility on innovation and creativity. Entrepreneurial practices and organizational nature vary depending on the age of the entrepreneurial venture. The high percentage of participants in ventures that are (>=5 years) old indicates relative stability in the application of work systems and enhances the credibility of participants' responses about the current work environment. Table 6 shows that the largest percentage of sample members are those with ten years or more of practical experience in the entrepreneurial field, constituting (31.7%), followed by those with less than one year of experience at (25.8%), followed by those with one to four years of experience at (23.3%), and finally those with five to nine years of experience at (19.2%). The distribution shows a good diversity in the level of experience of the study participants, which contributes to enriching the study results and providing numerous insights into the flexibility of the work environment on creative and innovative performance. The presence of the largest percentage of those with ten years or more reflects the functional and professional maturity of the sample members and supports the credibility of the answers and their cognitive depth regarding the study concepts.

### 3.4. Reliability of the Study Instrument

The reliability of the study instrument (homeostasis) is an important indicator to ascertain when developing measurement instruments in scientific research, with the aim of ensuring that paragraphs of the instrument measure the same concept consistently without unwarranted variability in responses. One of the most common statistical methods used to check for internal consistency is Cronbach's coefficient alpha. Cronbach's coefficient (Alpha) is used to estimate the degree of internal consistency between axis paragraphs measuring a certain dimension, between (0 and 1); the closer the value is to (1), the greater the consistency and consistency between axis paragraphs. The scale is acceptable if it exceeds (0.70), and well if it exceeds (0.90), as shown in Table 7.

**Table 7**  
Interpretation Levels of Cronbach's Alpha Coefficient

Cronbach's Alpha Value	Less than 0.60	0.60 – 0.69	0.70 – 0.79	0.80 – 0.89	0.90 and above
Reliability Level	Unacceptable	Questionable	Acceptable	Good	Excellent

Cronbach's alpha coefficient was calculated for each of the study's two axes, and the results were as shown in Table 8.

**Table 8**  
Cronbach's Alpha Coefficient for the Study Dimensions

Dimension	Number of Items	Cronbach's Alpha	Reliability Level
Flexible Work Environment	20	0.874	Good
Creativity and Innovation	36	0.930	Excellent

**Table 4**  
Distribution of the Sample According to Job Title

Job Title	Frequency	Percentage (%)
Founder	46	38.3%
Co – Founder	29	24.2%
Employ	45	37.5%
<b>Total</b>	<b>120</b>	<b>100.0%</b>

**Table 6**  
Distribution of the Sample According to Years of Experience

Years of Experience	Frequency	Percentage (%)
< 1 year	31	25.8%
1 – 4 years	28	23.3%
5 – 9 years	23	19.2%
>= 10 years	38	31.7%
<b>Total</b>	<b>120</b>	<b>100.0%</b>

Based on Table 8, Cronbach's homeostasis coefficient is alpha for the first axis (work environment elasticity), which includes (20) paragraphs (0.874), which falls within the range (0.80 - 0.89). The second axis (creativity and innovation), with (36) paragraphs, has a Cronbach's internal stability coefficient of (0.930), which reflects an excellent level of internal stability above (0.90), indicating high consistency between paragraphs and indicating that the axis measures creativity and innovation with high accuracy and reliability.

### 3.5. Descriptive Analysis of the Study Dimension

This section aims to analyze the responses of sample members to the paragraphs of the study tool (questionnaire) using appropriate descriptive statistics. The purpose is to identify the level of practice of the main variables addressed by the study, namely (workplace flexibility, creativity, and innovation) in emerging entrepreneurial projects in companies in the Kingdom of Saudi Arabia.

#### 3.5.1. First Dimension Flexible Work Environment

This axis measures the level of work environment flexibility within entrepreneurial projects through (20) paragraphs distributed across various aspects of organizational flexibility, temporal flexibility, and administrative flexibility. The study participants' responses to these paragraphs were analyzed using the arithmetic mean to measure the degree of general agreement with each paragraph, the standard deviation to measure the extent of response variance, the level to rank the paragraphs from highest to lowest according to arithmetic averages, and the rating score according to the five-point Likert scale. The evaluation score was classified based on the criteria shown in Table (2). Since the (Work Environment Flexibility) axis contains (20) items, the results will be presented in two tables. Table (9) displays the (Work Environment Flexibility) axis items from (1-10), Table 10 displays the (Work Environment Flexibility) axis items from (11-20), and each table is followed by a precise and detailed descriptive analysis of the items in terms of mean, deviation, rank, and evaluation score.

**Table 9**

Means, Standard Deviations, and Agreement Levels for Items of Flexible Work Environment (1 – 10)

Item No.	Item Statement	Mean	Std. Deviation	Rank	Agreement Level
1	The company does not set daily working hours (for example, 8 a.m. to 5 p.m.), but rather gives employees the freedom to choose their own work hours.	3.89	1.098	9	High
2	The company does not set daily working hours but rather relies on weekly working hours that employees can divide throughout the week according to their personal schedules.	3.93	1.139	8	High
3	The company does not focus on specific working hours, but rather on completing the required work.	4.04	0.738	4	High
4	If shifts are involved, the company allows employees to coordinate among themselves to determine shift hours that suit their daily circumstances.	4.09	0.745	1	High
5	Managers understand delays in submitting the required work in the event of a personal emergency.	4.01	0.865	6	High
6	Employees may leave work for a few hours and then return to work or complete work from home, depending on their personal circumstances.	3.63	1.396	10	High
7	Employees have the right to choose the workplace where they wish to complete their work.	3.98	0.974	7	High
8	Employees may switch from full time to part-time whenever their personal needs require it.	4.06	1.023	2	High
9	The company provides employees with the freedom to work remotely during the week or whenever necessary.	4.04	0.771	4	High
10	The company offers a full-time work-from-home system that allows employees to return to the company only when necessary or at the employer's request.	4.06	0.781	2	High

Table 9 reflects the results of analyzing participants' responses to a set of items related to flexibility of time and place, and the managerial approach within the work environments of emerging entrepreneurial projects in Saudi Arabia. The results showed that the arithmetic means of the items on the axis of workplace flexibility ranged between (3.63) and (4.09), which falls within the "high" rating level, according to the five-point Likert scale adopted in the study. This indicates a high level of awareness among employees of the importance of workplace flexibility. The results indicate that the highest-rated items relate to allowing employees freedom to coordinate shift times "If shifts are involved, the company allows employees to coordinate among themselves to determine shift hours that suit their daily circumstances", with an average of (4.09). They also include the possibility of switching from part-time work "Employees may switch from full time to part-time whenever their personal needs require it", working remotely when necessary "The company provides employees with the freedom to work remotely during the week or whenever necessary", or working remotely "The company offers a full-time work-from-home system that allows employees to return to the company only when necessary or at the employer's request", this indicates a flexible organizational approach that supports adapting to employees' personal and professional needs. Some items related to management's understanding of emergency situations and allowing multiple work locations reflected a clear trend toward fostering a culture of trust and flexibility, which are important foundations of a flexible, contemporary work environment.

Although the item “The ability to leave work for a few hours and then return” received the lowest mean score of (3.63), it remains within the “high” rating level. This confirms the continued presence of flexibility, albeit at varying degrees across practices. The results indicate that work environments in Saudi entrepreneurial projects are receptive to the application of modern flexibility concepts, particularly those related to time and place. This contributes to improving employee quality of life and enhancing productivity, and is one of the factors that foster creativity and innovation within projects.

**Table 10**

Means, Standard Deviations, and Agreement Levels for Items of Flexible Work Environment (11 – 20)

Item No.	Item Statement	Mean	Std. Deviation	Rank	Agreement Level
11	The company does not restrict employees to specific dress codes.	3.54	1.624	10	High
12	The company provides several spaces where employees can work.	4.09	0.686	2	High
13	Employees can control the temperature, lighting, and noise levels within the indoor environment.	3.79	1.384	6	High
14	The company provides interactive spaces for employees to spend their leisure time.	4.13	0.693	1	High
15	The company holds events during work hours to reduce employee stress.	3.78	1.304	7	High
16	The company allows employees to leave its headquarters to complete work in cafés or co- working spaces (study or workhouses).	4.09	0.710	2	High
17	The company offers various jobs with different roles and responsibilities, allowing employees to acquire a variety of skills.	3.72	1.298	9	High
18	The company gives employees the right to choose their work methods and does not require them to complete their work within a specific protocol.	3.78	1.134	7	High
19	The company welcomes employee ideas and promotes their participation in decision-making.	4.07	0.742	4	High
20	Employees can change their tasks based on their interests and areas of professional excellence in coordination with managers.	3.94	0.737	5	High

The results of this set of items reflect the dimensions of the workplace flexibility axis, which focuses on aspects related to spatial, cultural, and organizational flexibility in entrepreneurial organizations. The arithmetic means ranged between (3.54) and (4.13), all falling within the “high” category according to the five-point Likert scale adopted. This indicates a good degree of empowerment and acceptance within the work environments covered by the study. The highest means were recorded in the item stating “The company provides interactive spaces for employees to spend their leisure time”, with an average of (4.13), this was followed by items related to providing diverse workplaces, with an average of (4.09), allowing work from outside the official headquarters, with an average of (4.09), and openness to sharing ideas and decisions, with an average of (4.07). These results indicate that the workplace is characterized by a clear degree of openness and human design that takes into account the psychological and social needs of employees, elements directly linked to increased satisfaction, motivation, and innovation. The results showed that organizations grant their employees a good degree of freedom to choose their work methods, with an average of (3.78), and a variety of tasks, with an average of (3.72). This enhances professional empowerment and reduces job rigidity. The item related to not imposing a specific uniform received the lowest average of (3.54), which falls within the “high” category. However, it indicates a degree of formal flexibility, even if it is less than other aspects such as location and administrative organization.

Overall, the results indicate that entrepreneurial work environments in the Kingdom of Saudi Arabia display an advanced level of flexibility in infrastructure and organization. This creates a climate that supports psychological comfort and professional diversity, which constitutes an important basis for fostering creativity and innovation within the workplace.

### 3.5.2. Second Dimension Creativity and Innovation

This section addresses participants' opinions on the level of creativity and innovation within emerging entrepreneurial projects in Saudi Arabia. This section was designed to measure the extent to which individuals practice creative behaviors and adopt new ideas and methods in their work environment, as well as their engagement in improving processes and providing innovative solutions that enhance the organization's efficiency and competitiveness. This section includes (36) items distributed across dimensions reflecting creative thinking, cognitive flexibility, adaptability, implementing innovative solutions in daily tasks, and generating new ideas. Participants' responses were measured using a five-point Likert scale, which enabled the identification of general trends regarding the availability of creativity and innovation in the workplace. This analysis will help uncover the relationship between workplace flexibility and employee creativity and innovation, a key area the study sought to explore. This contributes to understanding the potential factors for developing entrepreneurship in Saudi Arabia. Table 11 presents an analysis of participants' responses to a set of indicators reflecting aspects of creative thinking, mental flexibility, adopting new approaches to task performance, and adaptability. The results showed that the arithmetic means ranged between (3.68) and (4.35), all falling within the “high” to “very high” level of actual practice of creative behaviors in entrepreneurial work environments in Saudi Arabia. The Item stating “I have viewed these issues and events from different perspectives” recorded the highest arithmetic mean of (4.35), reflecting participants' ability to use analytical and critical thinking skills when dealing with work problems, a key characteristic of creative individuals. The Items stating “I reorganize my priorities from time to time”, “I can use diverse thinking styles”, and “I used advanced and new methods to accomplish the tasks and work assigned to me” recorded an arithmetic mean of (4.23), which is within the “high” level, indicating the existence of an environment that encourages intellectual flexibility and an appreciation of diverse work styles.

The Item stating “I can employ science fiction to accomplish tasks assigned to me” had the lowest mean, at (3.68), falling within the “high” category. This may indicate that the use of imagination or innovation is not a common behavior among all participants, but rather is viewed as less practical compared to other creative behaviors. The results also indicate that participants possess high adaptability, respect for others' opinions, and the ability to modify work methods. These characteristics represent the cornerstone of building an organizational culture that supports innovation.

**Table 11**

Means, Standard Deviations, and Agreement Levels for Items of Creativity and Innovation (1 – 12)

Item No.	Item Statement	Mean	Std. Deviation	Rank	Agreement Level
1	I have viewed these issues and events from different perspectives.	4.35	0.603	1	Very High
2	I do not hesitate to change my position when I am convinced it is incorrect.	4.22	0.769	5	Very High
3	I used advanced and new methods to accomplish the tasks and work assigned to me.	4.23	0.683	3	Very High
4	I am sure to learn the perspectives of others and benefit from them.	3.88	1.258	9	High
5	I can quickly adapt to new and unexpected situations.	4.08	0.967	7	High
6	I give those around me enough time to express their opinions and suggestions without restrictions.	4.08	1.185	7	High
7	I apply laws and regulations to suit the surrounding environment and achieve optimal work performance.	3.96	1.305	8	High
8	I reorganize my priorities from time to time.	4.23	0.827	3	Very High
9	I modify my work methods when the circumstances change.	4.22	0.712	5	Very High
10	I can use diverse thinking styles.	4.23	0.827	3	Very High
11	I can employ science fiction to accomplish tasks assigned to me.	3.68	1.426	12	High
12	I can present many ideas in a relatively short time.	4.14	0.981	10	Very High

Overall, the results reflect a flexible work environment that encourages renewed thinking, reconsidering positions, and adopting modern methods. This is a positive indicator of the willingness of entrepreneurial organizations to embrace creativity and innovation as a cultural organizational value.

**Table 12**

Means, Standard Deviations, and Agreement Levels for Items of Creativity and Innovation (13 – 24)

Item No.	Item Statement	Mean	Std. Deviation	Rank	Agreement Level
13	I developed a set of solutions to address a single problem.	4.24	0.745	3	Very High
14	I use brainstorming to enrich my thinking process.	3.80	1.363	11	High
15	I can identify the consequences of this decision.	3.98	1.145	9	High
16	I can leverage my previous experiences and knowledge to generate new knowledge and solve the problems I face.	4.09	1.021	10	High
17	I possess the ability to convince others of my point of view through arguments and evidence.	4.25	0.822	1	Very High
18	I have the ability to employ the greatest possible number of words to convey a specific idea.	4.18	0.774	8	Very High
19	I have the ability to express my thoughts easily and clearly.	4.13	0.784	12	Very High
20	I have the ability to think quickly in various situations.	4.04	1.088	13	High
21	I have contributed to the production of new ideas that no one has previously considered.	4.21	0.721	7	Very High
22	I offer solutions with long-lasting effects.	4.24	0.698	3	Very High
23	I adopt a unique and unconventional approach to solving the problems I encounter.	4.24	0.745	3	Very High
24	I examine ideas and do not rush to accept or reject them.	4.10	0.929	6	Very High

Table 12 analyzes participants' responses to a set of indicators reflecting their ability to generate ideas, solve problems creatively, and express ideas. The results indicate that the arithmetic means ranged between (3.80) and (4.25), reflecting a "high" to "very high" degree of agreement among sample members that creative thinking and cognitive expression behaviors are clearly practiced in their work environments. The Item stating “I possess the ability to convince others of my point of view through arguments and evidence” recorded the highest mean of (4.25), along with other paragraphs that achieved similar means, such as “I developed a set of solutions to address a single problem”, “I offer solutions with long-lasting effects”, and “I adopt a unique and unconventional approach to solving the problems I encounter”. These results indicate that participants are not satisfied with traditional solutions alone, but also seek to produce diverse and effective alternatives characterized by originality and effectiveness, which are key features of innovation. The results showed that paragraphs related to linguistic and verbal expression achieved high means, such as “I have the ability to express my thoughts easily and clearly” with a mean of (4.13), and “I have the ability to employ the greatest possible number of words to convey a specific idea” with a mean of (4.18), this reflects a good level of communicative competence, which is an important aspect of conveying innovative ideas in the workplace. The item “I use brainstorming to enrich my thinking process” recorded the lowest mean value of (3.80), falling within the “high” category, indicating that some group thinking tools are not used regularly or systematically by all participants. Overall, the results reflect that the work environment is stimulating for knowledge generation and expression in a variety of ways. They indicate that individuals in entrepreneurial projects possess a high degree of strategic and expressive thinking, which enhances opportunities for innovative growth within organizations.

**Table 13**

Means, Standard Deviations, and Agreement Levels for Items of Creativity and Innovation (25 – 36)

Item No.	Item Statement	Mean	Std. Deviation	Rank	Agreement Level
25	I can integrate and harmonize ideas to produce new, highly effective ideas.	3.98	1.141	9	High
26	I focus more on the quality of the ideas than on their quantity.	4.29	0.726	2	Very High
27	I focus on achieving added value through my work.	4.05	1.068	11	High
28	I can make indirect and distant connections with the existing knowledge in my cognitive system.	4.33	0.678	1	Very High
29	I do not repeat the same solutions to existing problems in different situations.	4.08	0.909	10	High
30	I can express my opinions in a unique and unconventional manner.	4.22	0.772	6	Very High
31	I always want to try new things at work.	4.23	0.683	4	Very High
32	I frequently try to turn my ideas into original practical applications.	4.13	0.869	7	Very High
33	I look for new ways to perform tasks assigned to me.	3.70	1.476	12	High
34	I enjoy leading tasks with innovative features.	3.98	1.230	9	High
35	I can find creative solutions to these problems.	3.81	1.416	13	High
36	I can form coherent ideas by integrating my daily life experiences with newly learned information	4.27	0.827	3	Very High

This table analyzes indicators related to complex creativity, knowledge integration, and practical innovation, aspects that are considered among the highest levels of creative thinking. The results showed that the arithmetic means ranged between (3.70) and (4.33), all falling within the “high” category. This reflects the participants' positive perception of their innovative practices in the entrepreneurial work environment. The Item stating “I can make indirect and distant connections with the existing knowledge in my cognitive system” recorded the highest arithmetic mean, at (4.33), which falls within the “very high” category. This was followed by the Item stating “I focus more on the quality of the ideas than on their quantity”, with a mean of (4.29), and then the Item stating “I can form coherent ideas by integrating my daily life experiences with newly learned information”, with a mean of (4.27). These results reflect the participants' ability to generate new ideas based on cumulative experience, which enhances long-term strategic innovation. The Item stating “I look for new ways to perform tasks assigned to me” had the lowest arithmetic mean in this section, at (3.70), this indicates that the search for new ways to implement tasks is not practiced to the same degree as other cognitive practices and may be affected by work conditions and the administrative structure. Items “I can express my opinions in a unique and unconventional manner” and “I always want to try new things at work”, whose arithmetic means ranged between (4.22) and (4.23), indicate a strong tendency among participants to adopt scientific and behavioral creative thinking, which supports the transformation from a level of thinking to a level of applied achievement.

Overall, the results confirm that the participants' work environment provides space for the integration of knowledge, innovation, and experimentation, and provides opportunities for implementing creative ideas. This enhances the effectiveness of creativity as a primary driver for developing entrepreneurial projects in the Kingdom of Saudi Arabia.

### 3.6. Analysis of Differences in Participants Mean Responses According to Demographic Variables

This section attempts to test hypotheses regarding the existence of statistically significant differences in the average sample population responses to the subject area (flexibility of the working environment, creativity and innovation), by demographic variables (job title, age of the pilot project, number of years of experience). To achieve this goal, the One – Way ANOVA test, the most relevant statistical method, was used when comparing more than two independent groups in terms of their average responses. Each demographic variable was tested individually in order to verify the significance of statistical differences between its populations in terms of study themes.

**Table 14**

One Way ANOVA Results of Participants Responses on (Flexibility and Creativity) by Job Title

Dependent Variable	Source of Variance	Sum of Squares	df	Mean square	F Value	Sig.
Flexibility Mean	Between Groups	0.793	2	0.397	1.272	0.284
	Within Groups	36.475	117	0.312		
	<b>Total</b>	<b>37.268</b>	<b>119</b>			
Creativity Mean	Between Groups	0.896	2	0.448	1.615	0.203
	Within Groups	32.434	117	0.277		
	<b>Total</b>	<b>33.330</b>	<b>119</b>			

The results of the ANOVA test showed that there were no statistically significant differences in participants' average responses to "work environment elasticity" and "creativity and innovation" attributable to “job title”, with the statistical elasticity of the work environment elasticity axis being (0.284) and the creativity and innovation axis being (0.203), both greater than the approved statistical significance level of (0.05). This suggests that the nature of job title is not significantly affected by individuals' assessment of the flexibility of their work environment or their creativity and innovation.

**Table 15**

One Way ANOVA Results of Participants Responses on (Flexibility and Creativity) by Project Age

Dependent Variable	Source of Variance	Sum of Squares	df	Mean square	F Value	Sig.
Flexibility Mean	Between Groups	0.857	3	0.286	0.910	0.438
	Within Groups	36.411	116	0.314		
	<b>Total</b>	<b>37.268</b>	<b>119</b>			
Creativity Mean	Between Groups	0.222	3	0.074	0.260	0.854
	Within Groups	33.108	116	0.285		
	<b>Total</b>	<b>33.330</b>	<b>119</b>			

ANOVA results indicate that there were no statistically significant differences in the average participants' responses around the “flexibility of the work environment” axis and the “creativity and innovation” axis attributable to the “age of the pilot project”. The approved statistical significance exceeded (0.05), the flexibility of the work environment axis was (0.438), and the creativity and innovation axis was (0.854). This shows that the flexibility of the work environment and the level of creativity and creativity do not vary with the length of time that the project has been established.

**Table 16**

One Way ANOVA Results of Participants Responses on (Flexibility and Creativity) by Years of Experience

Dependent Variable	Source of Variance	Sum of Squares	df	Mean square	F Value	Sig.
Flexibility Mean	Between Groups	0.503	3	0.168	0.529	0.663
	Within Groups	36.765	116	0.317		
	<b>Total</b>	<b>37.268</b>	<b>119</b>			
Creativity Mean	Between Groups	0.710	3	0.237	0.841	0.474
	Within Groups	32.620	116	0.281		
	<b>Total</b>	<b>33.330</b>	<b>119</b>			

The results of the ANOVA test showed no statistically significant differences in participants' responses to the “workplace flexibility” and “creativity and innovation” axis based on the “number of years of experience” axis. The statistical significance value for the work environment flexibility axis reached (0.663) and for the creativity and innovation axis (0.474), both of which are higher than the approved statistical significance level (0.05). This indicates that the level of experience does not make a fundamental difference in individuals' perceptions of work environment flexibility or creativity and innovation.

#### 4. Discussion

##### 4.1. Answer to the First Sub – Question

*What is the level of work environment flexibility in emerging entrepreneurial projects in Saudi companies?*

The aim was to measure the level of workplace flexibility in emerging entrepreneurial projects. Participants' responses were analyzed on the “Workplace Flexibility” axis, which comprises (20) items distributed across multiple dimensions reflecting workplace flexibility practices, such as administrative and organizational flexibility, temporal flexibility, and spatial flexibility. The results showed that the arithmetic means ranged between (3.54) and (4.13), which falls within the “high” category on the five-point Likert scale. The highest values were recorded in the items addressing freedom to choose work hours, providing multiple work spaces, management's appreciation of personal circumstances, and the possibility of remote work. This indicates that Saudi emerging companies are adopting flexible approaches in organizing the workplace and reflects awareness of the importance of adapting to employee needs and achieving a work-life balance. The results indicate the availability of flexibility in emerging entrepreneurial environments.

##### 4.2. Answer to the Second Sub – Question

*What is the level of creativity and innovation in emerging entrepreneurial projects in Saudi companies?*

The second axis (creativity and innovation) was analyzed, which comprised (36) items distributed across multiple dimensions, such as creative thinking, problem-solving, mental flexibility, and new knowledge production. The results showed that the arithmetic means ranged between (3.68) and (4.35), with the items addressing generating original ideas, adopting unconventional solutions, using modern methods, and viewing issues from different perspectives recording the highest means. This indicates a high level of creative practices among the sample members. The results reflect the presence of innovative behaviors and attitudes in the work environments studied.

##### 4.3. Answer to the Third Sub – Question

*Are there statistically significant differences between the average responses of participants regarding the relationship between work environment flexibility, creativity, and innovation attributable to the variables of job title, age of the entrepreneurial project, and number of years of experience?*

To answer this question, a One-Way ANOVA test was used to test the differences between the response averages according to the three demographic variables: "Job Title." The statistical significance value for the "Workplace Flexibility" axis and the "Creativity and Innovation" axis was greater than (0.05), meaning there were no statistically significant differences. Regarding the "Age of the Entrepreneurial Project" variable, there were also no statistically significant differences. Regarding the "Number of Years of Experience" variable, there were also no statistically significant differences. Therefore, the results indicate that there are no statistically significant differences in the participants' responses regarding workplace flexibility or the level of creativity and innovation attributable to differences in demographic variables.

#### 4.4. Answer to the Main Question

*What is the role of work environment flexibility in influencing the level of creativity and innovation in emerging entrepreneurial projects within Saudi companies?*

The results showed that the participants had a high level of agreement with the indicators of workplace flexibility and demonstrated very high levels of agreement on the indicators related to creativity and innovation. Although the study did not include a statistical test for correlation or direct influence, such as regression or Pearson's correlation, the general trends of the data indicate a positive relationship between the availability of flexibility in the workplace and the promotion of creative and innovative behaviors. Therefore, we can conclude that workplace flexibility is a motivating and enabling factor for creativity and innovation within entrepreneurial projects, by providing a flexible environment that enables individuals to express their feelings, implement new work methods, and interact freely with the work environment.

#### 4.5. Comparison of the Current Study Results with Previous Studies

The results of this study demonstrate clear consistency with a number of previous studies that addressed the relationship between workplace flexibility and levels of creativity and innovation in entrepreneurial ventures. The results indicated that a higher level of workplace flexibility was accompanied by higher levels of creativity and innovation, which is consistent with the approach of Mumin *et al.* (2013), who argued that creativity requires a supportive environment that allows for the integration of elements to generate new ideas or products that add real value to the workplace. The study results confirmed that flexibility in organizing time and place and working remotely enhances an individual's ability to think more freely. This result is consistent with the findings of Piszczek and Pimputkar (2021), who indicated that traditional, rigid work models constitute an obstacle for employees, especially those who rely on knowledge, due to the psychological pressures they cause, which reduces their opportunities for creative thinking. Providing flexible work models reduces stress and conflict and fosters a supportive work environment, a finding supported by Yunus and Mostafa (2021).

The results of the current study support the proposal of Khedhaouria *et al.*, (2015), that creative self-efficacy is a key factor in motivating individuals to innovate, especially in environments that allow employees to freely express their ideas without bureaucratic restrictions. The results are consistent with Sternberg (2017), who defined creativity as a product characterized by quality, intensity, and surprise. These qualities were evident in the participants' evaluations and responses to their creative behaviors within a flexible work environment. Overall, we can say that this study contributes to the strengthening of previous literature on the relationship between flexible work environments, creativity, and innovation, and emphasizes the importance of building an organizational culture that tolerates expression, embraces diversity in work methods, and reduces constraints. This is one of the most important pillars of the sustainability of entrepreneurial projects in Saudi Arabia.

## 5. Conclusion and Recommendations

The study aimed to explore the role of flexible work environments in enhancing creativity and innovation within emerging entrepreneurial projects in companies in the Kingdom of Saudi Arabia, through an integrated theoretical framework and statistical analysis of study participants' data. The study sought to answer the main question related to the extent to which flexible work environments affect creativity and innovation, in addition to a number of related sub-questions. The results showed that work environments characterized by the freedom to organize working hours, the possibility of working remotely, and multiple options for task execution methods represent a work environment that stimulates creative thinking and contributes to raising the level of innovation and creativity among employees. Participants expressed a high level of agreement with statements reflecting creative and innovative practices, such as innovative thinking, the ability to adapt, and introducing new, non-traditional approaches. This reinforces the hypothesis that organizational flexibility is an essential factor in developing innovative thinking. The results revealed no statistically significant differences between individuals' responses based on job title, age of the entrepreneurial project, and number of years of experience. This indicates that the impact of flexible work environments on creativity and innovation is not limited to one category, but rather extends to employees with diverse backgrounds and professional experiences. Based on the results, this study is considered a qualitative addition to the contemporary literature in the field of entrepreneurship and organizational innovation behaviors, by highlighting the importance of work environment flexibility as a fundamental catalyst for creativity and innovation, especially in the context of emerging entrepreneurial projects in the Kingdom of Saudi Arabia.

Based on the study results, the researcher proposes a set of recommendations that would enhance the flexible work environment and support creativity and innovation within emerging entrepreneurial projects:

- Promoting a culture of flexible work within entrepreneurial companies by establishing clear policies that allow employees the freedom to choose their work location and work hours, in line with the nature of their tasks and personal needs.
- Developing a digital and technological infrastructure to support remote work, which ensures continuity of job performance without the need for physical presence at the company headquarters.
- Training leaders and administrators to effectively manage flexible work teams and provide them with the necessary skills to lead innovation and motivate creativity in non-traditional work environments.
- Creating work environments that stimulate creativity and innovation, including diverse workspaces, providing flexibility in task execution, and encouraging ideas and proposals.
- Adopting evaluation systems based on results rather than traditional working hours, with the goal of fostering entrepreneurship and achieving goals with the highest degree of innovation and efficiency.
- Encouraging future research to study the relationship between organizational flexibility and other areas, such as organizational commitment, job satisfaction, and productivity, in

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