

The Impact of Courageous Leadership Practices on Enhancing Entrepreneurial Behavior in Human Resources

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Abstract

This study will study the effect of courageous leadership which is an independent variable affecting the entrepreneurial behavior of the human resource management which is a dependent variable to the Ministry of Labor and Social Affairs. As the subject is very important for public organizations given their role in the society, the research used a descriptive-analytical methodology. This study accessed a purposive sample of 125 respondents, that included senior, middle and executive leaders. The main research tool was 30-item questionnaire. Data analysis was done through SPSS (version 25) applying mean, standard deviation, coefficient of variation, R², F-test, simple linear regression, relative importance and Pearson correlation test to check the hypothesis. The results showed that the dimensions of courageous leadership are collectively used by administrative leaders to better strengthen HR entrepreneurial behavior rather than through the individual dimension, indicating a high correlation and combination between each dimension of courageous leadership and promoting proactive and innovative behavior.

1. Introduction

In today's business environment, characterized by complexity, rapid change, and uncertainty, leadership has become a critical factor in organizations' ability to adapt, sustain performance, and achieve success. Among contemporary leadership approaches that have attracted increasing attention in management literature, courageous leadership has emerged as a leadership style that emphasizes principled and decisive action in the face of risks and challenges while maintaining commitment to organizational values and goals. Courageous leaders do not merely demonstrate personal boldness; rather, they strategically employ their cognitive and moral capabilities to guide organizations through complex environments, inspire employees, and create opportunities for growth and innovation (Lopez, 2025, p. 3).

Courageous leadership is manifested through several key dimensions, namely intellectual courage, creative courage, and followership courage. Intellectual courage enables leaders to challenge prevailing assumptions and make decisions under conditions of uncertainty, while creative courage encourages the pursuit of innovative solutions to organizational problems. Followership courage fosters a climate of trust, open communication, and shared responsibility among organizational members. Moreover, courageous leadership contributes to revitalizing the workforce, accelerating innovation, redesigning organizational processes, and breaking down organizational barriers in alignment with a shared vision and long-term organizational objectives (Anfara Jr et al., 2008, p. 4).

Contemporary organizations increasingly rely on their human resources as a primary source of competitive advantage and organizational sustainability. In this context, entrepreneurial behavior has emerged as a critical behavioral capability that enables employees to identify opportunities, generate innovative ideas, and actively contribute to organizational development. Entrepreneurial behavior creates economic, social, and organizational value while enhancing innovation, competitiveness, and organizational adaptability (Weismeier-Sammer, 2011, p. 129).

Since entrepreneurial behavior is fundamentally associated with initiative, innovation, and calculated risk-taking, supportive leadership practices are essential for its development. Consequently, courageous leadership represents a valuable leadership approach capable of creating a work environment that encourages independent thinking, initiative, experimentation, and the willingness to challenge conventional practices. Therefore, examining the impact of courageous leadership practices on entrepreneurial behavior in human resources is of considerable theoretical and practical importance.

The contemporary literature emphasizes the significant role of courageous leadership in promoting organizational effectiveness through ethical decision-making, innovation, and organizational resilience. Intellectual courage enables leaders to critically evaluate existing practices and support informed decision-making, while creative courage encourages experimentation and the adoption of novel ideas. Likewise, followership courage strengthens trust, collaboration, and accountability within organizations (Lopez, 2025; Anfara Jr et al., 2008).

Similarly, entrepreneurial behavior has received considerable attention due to its contribution to organizational effectiveness and innovation. Entrepreneurial employees are characterized by their tendency toward innovation, calculated risk-taking, and proactive behavior. Stevenson and Jarillo (2007, p. 159) argued that individuals with a strong need for achievement are more likely to engage in planning, initiative-taking, responsibility, and the pursuit of ambitious goals, all of which are closely associated with entrepreneurial behavior. Furthermore, entrepreneurial behavior enhances organizations' ability to identify opportunities, develop innovative solutions, and achieve superior competitive performance (Weismeier-Sammer, 2011, p. 129).

The existing literature suggests a conceptual relationship between courageous leadership and entrepreneurial behavior, as leadership practices that encourage independent thinking, creativity, and responsible risk-taking are likely to foster entrepreneurial tendencies among employees.

Despite the growing scholarly interest in courageous leadership and entrepreneurial behavior, most studies on courageous leadership have primarily focused on outcomes such as organizational performance, ethical conduct, change management, and employee commitment (Lopez, 2025). In contrast, research on entrepreneurial behavior has largely concentrated on innovation, organizational entrepreneurship, and competitive outcomes (Weismeier-Sammer, 2011).

More specifically, empirical studies examining the direct impact of the dimensions of courageous leadership intellectual courage, creative courage, and followership courage—on entrepreneurial behavior in human resources through its dimensions of innovation, risk-taking, and proactive behavior remain relatively limited. Furthermore, empirical evidence from developing and Arab contexts remains scarce, highlighting the need for further investigation to better understand the nature of this relationship and its implications for contemporary organizations.

Based on the foregoing discussion, this study aims to examine the impact of courageous leadership practices on enhancing entrepreneurial behavior in human resources. Specifically, it seeks to determine the extent to which intellectual courage, creative courage, and followership courage influence innovation, risk-taking, and proactive behavior among human resources. In doing so, the study contributes to the leadership and entrepreneurship literature and provides practical insights that may assist organizations in fostering entrepreneurial behavior through courageous leadership practices.

2. Literature Review

It is clear from the literature review that courageous leadership and hrm entrepreneurial behaviour may have theoretical linkages, but this relationship has not been explored to an adequate level of examination. Provitera et al. According to the authors (2023, p. 6), courageous leadership "is the leader's behaviour to make a right decision with moral values facing pressure and uncertainty at work, and it helps to build organizational trust and increase positive employee behaviours, which in turn indirectly influence performance and behaviour in the organization. This aligns with Li et al. Leadership styles favorable to initiative enhance innovative behavior of employees via mediation of enhanced self-efficacy and supportive organizational climate (2020, p. 5). Since entrepreneurial behavior cannot arise in isolation from leadership influence (van der Sijde & van der Sijde 2020), Similarly, Bagheri et al. According to Poon and Poon (2020, p. 12), proactiveness and audacity of leaders begets ideas and promotes action, thus enhancing entrepreneurial behavior as an integrated process involving creativity and execution. Similarly in other context, Malibari and Bajaba (2022, p. 3) validate that the role of leadership in shaping entrepreneurial behavior is not direct but indirect via innovation climate and cognitive agility which reveals that the organizational environment does more important work in converting leadership orientations into concrete entrepreneurial behaviors.

However, underneath there is a more nuanced intellectual struggle. According to one viewpoint, the nature of leadership, including courageous leadership, serves as a direct behavioral antecedent of entrepreneurship because it induces the spirit and activities characterized by boldness and initiatives, implying that a courageous leader provides tangible behavior patterns for his/her followers in an organization (Li et al., 2020, p. 6; Bagheri et al., 2020, p. 13). On the other side of the equation, it has been said that this influence is not direct but operates through psychological and organizational systems like trust, ethical climate, and innovation which suggests that courageous leadership will not encourage entrepreneurial behaviour in the absence of a conducive environment (Malibari & Bajaba, 2022, Provitera et al, 2023). This debate also raises even more foundational questions

related to the very nature of courageous leadership itself: If some strands of research in this space contend that it is an overt and quantifiable leadership behaviour (such as at www.courageousleadershipinstitute.com), others and based on the theoretical foundations of leadership frame it as a more latent ethical/psychological construct (and its not very easy to isolate it empirically) weakening conceptual consistency across studies (Provitera et al., 2023, p. 9)? Next, a disagreement is around the relationship of leadership and behaviour where entrepreneurship behaviour can be seen as a reaction to leadership, or it is the result of a aggregated processes of complex interaction in the organization, since over-emphasizing the role of leadership may overlook some critical contextual and organizational factors (Malibari & Bajaba, 2022, p. 5).

Thus, the following research gap is obvious, as empirical studies are still missing, to integrate courageous leadership directly with entrepreneurial behavior in HRM in one model in an Arab organizational context. Earlier research has either examined the associations between courageous leadership and ethical outcomes (Provitera et al., 2023, p. 9) or the link between entrepreneurial leadership and innovative behavior (Bagheri et al., 2020, p. 14), leaving the direct or indirect effect of courageous leadership on entrepreneurial behavior and the nature of their relationship untested. This gives a solid scientific justification for the present study to fill the gap.

3. Theoretical Background

3.1. Concept of Courageous Leadership

Courageous leadership is the key to great leadership —a willingness to take risks where and when others are afraid to do so, making the hard calls with courage and accuracy. The origin of the word courage may also explain that courage is an inner strength which is an inner association with the person because the Latin meaning of cor is heart, and the Greek meaning of Andra is manliness (Şen et al., 2013). According to the American Heritage Dictionary of the English Language (1996), courage is defined as "the state or quality of mind or spirit that enables one to face danger, fear, or adversity with self-possession, confidence, and resolution". A leader who is willing to be able to embrace challenges yet also maintain high staff morale, is open to suggesting new ideas, and is willing to reestablish processes and frameworks that move the organization towards its objectives while continuing to evolve and effectively communicate as a leader in the organization (Anfara Jr et al., 2008). The core of courageous leadership lies in a clear vision, steadfast commitment, and the courageousry to act rightly even under the most challenging circumstances (Staver, 2012; Davis, 2018).

3.2. Requirements of Courageous Leadership

Courageous leadership requires a set of fundamental prerequisites to ensure effective leadership practices, which include (Stacey & Stacey, 2014):

- a. Building and living according to a vision: Understanding personal and organizational values and acting in alignment with them.
- b. Developing oneself as a new type of leader: Possessing emotional intelligence and the capacity to operate under complex pressures.
- c. Building trusted relationships with government and unions: Enhancing collaboration and achieving balanced professional interactions.
- d. Continuous skill development: Advancing practical and cognitive competencies to address the challenges of a dynamic business environment.
- e. Supporting small businesses and entrepreneurs: Providing policies and resources to support projects that generate sustainable economic opportunities.
- f. Ethical conduct and leading by example: Ensuring that behaviors and values align with professional and societal standards.
- g. Empowering institutional excellence: Leveraging current successes to build long-term sustainability.
- h. Adaptability to challenges and change: Possessing the courage and flexibility to make difficult decisions and confront risks consciously and professionally.

3.3. Dimensions of Courageous Leadership

Courageous leadership manifests through several key dimensions that define a leader's behavior and practices, including (Şen et al., 2013):

- a. Intellectual Courage: Enables leaders to understand the practical and cognitive aspects of their work, make strategic decisions based on comprehensive knowledge, and act confidently toward outcomes.
- b. Creative Courage: The ability to generate innovative solutions and pioneering ideas that lead to radical changes within the organization or surrounding systems.
- c. Follower Courage: Empowering individuals to participate actively, take risks, and initiate actions, thereby supporting courageous leadership and fostering collective commitment.

Together these dimensions provide a holistic framework wherein courageous leadership can be effectively employed as a means toward fostering lasting value-generating innovations, entrepreneurial activity, and situation-oriented strategies that meet the demands and goals of the organizational mission.

3.4. Concept of Entrepreneurial Behavior in Human Resources

The notion of entrepreneurial behaviour has become highly developed in modern management literature. No longer confined to the entrepreneurial creation of new ventures, innovation is increasingly recognized as an organizational behavior that unfolds within existing organizations, and it has drawn particular attention from scholars of human resource management. This change is related to a new managerial thinking where they want to motivate innovation and proactiveness (Neto et al, 2018:2) in the workplace. Entrepreneurial behavior is the actions and behaviors of people in organizations by which they pursue entrepreneurial opportunities through the following: innovation, proactivity, and risk-taking with a view to creating value for the organization (De Jong et al., 2015:982; Afsar et al., 2017:308). It is also understood as a forward-thinking, change-directed context-specific behaviour that seeks to identify and apply new ideas in work settings, regardless of the lack of resources (Hashimoto & Nassif, 2014:389).

Entrepreneurial behavior in the context of human resources indicates the innovative initiatives that employee's take to contribute effectively toward duration and value-based organization and improve performance by creatively deviating towards new technologies, methods, and approaches. It strengthens the strategic importance of Human Resources in organizational excellence (Neto et al., 2018:2).

3.5. Importance of Entrepreneurial Behavior in Human Resources

Entrepreneurial behavior is important as a main engine of contemporary organization growth and competitiveness in fast changing and uncertain environments. It also improves the existing organizations potential to pick new opportunities and adjust due environmental changes which in turn affect performance and survival in the long run (Neneh, 2019:275). Additionally, entrepreneurial behavior is a high-potential way to enhance organizational innovation. It incentivizes employees to produce and execute fresh ideas, resulting in better products, services, and internal processes which bolster the organizations competitive edge (Newman et al., 2018:2). Lastly, This attitude helps in human resource development by encouraging employees to take initiative, be self-reliant and responsible. It encourages measured risk-taking and creative problem-solving, and drives individual and team performance. Moreover, it helps ensure organizational viability by creating new revenue streams and new lines of business (Moghaddam et al., 2015:78).

3.6. Dimensions of Entrepreneurial Behavior in Human Resources

Most scholars agree that entrepreneurial behavior consists of three interrelated core dimensions that represent the essence of entrepreneurial practices within organizations:

3.6.1. Innovation

Innovation is viewed as a foundational element of entrepreneurial behavior as it reflects individuals capacity to introduce, create and implement new ideas in the organization. It relates to the process of developing new products or services, but it also cover therapeutic existing processes or practices for value added and competitiveness (De Jong et al., 2015:987; Newman et al., 2018:2) Whatever definition you settle on, it is purposeful action geared toward bringing about beneficial change and typically involves the application of novel or even unconventional methods to solve organizational challenges.

3.6.2. Risk-taking

This dimension refers to individuals' willingness to engage in activities that involve a certain level of risk when making decisions or implementing new initiatives, with an emphasis on calculated rather than reckless risk-taking. Risk-taking is a fundamental component of entrepreneurial behavior, as it involves committing resources under conditions of uncertainty in pursuit of potential opportunities (Moghaddam et al., 2015:78). It reflects organizational boldness in facing challenges and pursuing change.

3.6.3. Proactiveness

Proactiveness represents the tendency of individuals to take initiative and act in anticipation of future changes by identifying and exploiting emerging opportunities. It is a driving force behind the other dimensions, as it encourages individuals to actively seek opportunities and act ahead of competitors to gain a strategic advantage (Neneh, 2019:315). Proactiveness also involves influencing the organizational environment rather than merely adapting to it, through forward-looking and innovation-driven actions

4. Method

4.1. Research Problem

Despite the increasing importance of the concepts of courageous leadership and entrepreneurial behavior in modern work environments, scientific studies have shown a clear lack of applied research linking the three dimensions of courageous leadership (intellectual courage, creative courage, followership courage) with the three dimensions of entrepreneurial behavior (innovation, risk-taking, proactive behavior) within government institutions. While most of the studies that sought out how design thinking can be applied in public sector or public organizations focused on how it had already been practiced, the positive outcome was firm on the private sector or educational institutions and did not address other characteristics of the public sector like bootstrap organizations, administrative constraints to design thinking and lack of charisma and limited incentives for individual initiative. It is this gap that makes it hard for best leadership practices to be deployed to incentivize employees on innovation and entrepreneurial behavior with the result of poorer performance of institutional capacity. This study, therefore, intends to investigate the relationship between courageous leadership and entrepreneurial behavior among Ministry of Labor and Social Affairs (MOLSA) employees in Ethiopia to fill this gap.

4.2. Significance of the Study

The significance of this research can be observed at several levels:

- a. Academic: The paper fills a gap in the literature on courageous leadership and entrepreneurial behaviour and lays the foundation of further theoretical insights for public sector research.
- b. Pragmatic: Provides recommendations to senior management at the Ministry of Labor and Social Affairs for leadership practices that would foster entrepreneurial behavior among employees through courageous practices.
- c. Strategic: The research strengthens institutional capacity for innovation and adaptation to environmental changes, increasing the effectiveness of human resource management in achieving organizational development goals.

4.3. Research Objectives

The study aims to achieve several specific objectives:

- a. To analyze the relationship between the three dimensions of courageous leadership and the dimensions of entrepreneurial behavior in human resource management.
- b. To determine the effect of each courageous leadership dimension on innovation, risk-taking, and proactive behavior.
- c. To highlight practical gaps in the application of courageous leadership to enhance entrepreneurial behavior within the Ministry of Labor and Social Affairs.
- d. To provide practical recommendations to senior management for improving institutional performance and fostering innovation and initiative among employees.

4.4. The Hypothetical Research Model

In light of the theoretical framework, a hypothetical illustrative model of the research idea has been formulated to guide the study toward its objectives. The model represents the expected relationship between the research sample dimensions and the statement of solutions and goals. Based on a review of the literature on courageous leadership practices in the entrepreneurial behavior of human resource management, the hypothetical model aims to clarify the relationships between the main and sub-variables of the research. The following dimensions of courageous leadership were selected: (Intellectual Courage, Creative Courage, and Followership Courage) as the independent variable, according to the model of Şen et al. (2013). Meanwhile, the

dimensions of entrepreneurial behavior in human resource management were selected as (Innovation, Risk-taking, and Proactive Behavior) according to the study of Adomako, Opoku, and Frimpong (2018) (See Figure 1)

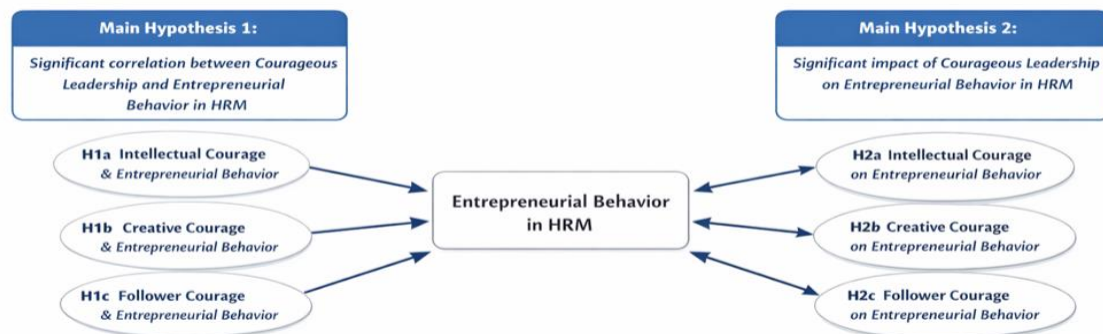


Figure 1. Hypothetical Research Model

4.5. Research Hypotheses

4.5.1. Main Hypothesis: There Is a Statistically Significant Correlation Between Courageous Leadership and Entrepreneurial Behavior in Human Resource Management

4.5.1.1. Sub-hypotheses of Main Hypothesis:

- There is a statistically significant correlation between intellectual courage and entrepreneurial behavior in human resource management.
- There is a statistically significant correlation between creative courage and entrepreneurial behavior in human resource management.
- There is a statistically significant correlation between follower courage and entrepreneurial behavior in human resource management.

4.5.2. Main Hypothesis: Courageous Leadership Has a Statistically Significant Impact on Entrepreneurial Behavior in Human Resource Management

4.5.2.1. Sub-hypotheses of Main Hypothesis:

- Intellectual courage has a statistically significant impact on entrepreneurial behavior in human resource management.
- Creative courage has a statistically significant impact on entrepreneurial behavior in human resource management.
- Follower courage has a statistically significant impact on entrepreneurial behavior in human resource management.

4.5.3. Research Population and Sample

Regarding the research population, the researcher adopted a comprehensive approach by studying the entire population through selecting a purposive sample that represented the whole population, consisting of senior, middle, and executive management in the Ministry of Labor, totaling 125 respondents. To select this sample, we opted for respondents that have job positions in which they are decision-makers and have experienced years in their fields.

The questionnaire was distributed in order to conduct statistics, where the researcher used the formula of Steven K. Thompson to determine the appropriate sampling size, where the analysis showed that the target sample size is 100 samples. In order to measure the whole population, researcher gave 130 questionnaire after calculating the required sample size. Out of the 128 questionnaires returned, 2 were not returned and 3 were

invalid. Therefore, the final sample of this study was 125 questionnaires included in the statistical analysis. This statistical equation was used to calculate the necessary sample size

$$n = \frac{NP(1-P)}{(N-1)(d^2/z^2) + P(1-P)} \quad (1)$$

$$n = \frac{(134)(0.50)(1-0.50)}{(134-1)(0.05^2/1.96^2) + (0.50)(1-0.50)} = 100$$

Information:

n: Required sample size

N: Population size

Z: Standard score corresponding to the confidence level (0.95), which equals 1.96; when squared, it becomes 3.8416

D: Margin of error, equal to 0.05

P: Proportion of neutral availability, equal to 0.50

4.6. Demographic Characteristics of the Research

Table 1: Demographics of the Research Sample (N = 125) Most of them are male (85.6%) and the participants are between 31–40 years (55.2%) The sample is also relatively highly qualified, with almost half of the respondents (47.2%) holding a Doctorate as their highest educational qualification. Distribution of years of service is well spread out (6–15 years: 57.6%) and shows that respondents have enough exposure to the organization. In conclusion, the sample is mainly of Unit Officers 48.8%, as these employees represent the operational core of the Ministry of Labor and Social Affairs. This demographic variation helps to lay the groundwork for an empirical examination of the relationship between the dimensions of courageous leadership and entrepreneurial behavior (See Table 1).

Table 1. Characteristics of the Research Sample

No.	Demographic Information	Category	Frequency	Percentage (%)
1	Gender	Male	107	85.6
		Female	18	14.4
		Total	125	100
2	Age	30 years or less	3	2.4
		31–40 years	69	55.2
		41–50 years	48	38.4
		51 years or more	5	4.0
		Total	125	100
3	Educational Qualification	Bachelor's	36	28.8
		Postgraduate Diploma	7	5.6
		Master's	23	18.4
		Doctorate	59	47.2
		Total	125	100
4	Years of Service	5 years or less	16	12.8
		6–10 years	40	32.0
		11–15 years	32	25.6
		16–20 years	30	24.0
		21 years or more	7	5.6
		Total	125	100
5	Job Position	Unit Officer	61	48.8
		Division Officer	17	13.6
		Department Head	29	23.2
		Director	12	9.6
		Dean	6	4.8
		Total	125	100

Prepared by the researcher based on SPSS statistical program results.

4.7. Reliability and Validity Test

4.7.1. Face Validity

The experts of administrative sciences were consulted to examine whether the items of the questionnaire were accurately measuring the research variables. Some items were deleted, others reworded, or new items were added to make the questionnaire more suitable for the study and the items were retained in the original order according to the feedback received.

4.7.2. Content Validity and Internal Consistency:

Content validity was assessed using Cronbach's Alpha to measure the internal consistency of the questionnaire items. The overall Cronbach's Alpha for all items was 0.901, indicating a high level of reliability and consistency.

At the variable level:

- a. Independent variable (Courageous Leadership, 15 items) had a Cronbach's Alpha of 0.865.
- b. Dependent variable (Entrepreneurial Behavior in HRM, 15 items) had a Cronbach's Alpha of 0.805.

4.7.3. Validity from Reliability Coefficient

Validity was also estimated using the square root of the reliability coefficient, resulting in $\sqrt{0.901} = 0.949$, which reflects high validity and confirms that the questionnaire reliably measures the intended variables (see Table 2).

Table 2. Reliability Coefficients of the Questionnaire Items

Variable	Measured Dimension	Number of Items	Cronbach's Alpha
Courageous Leadership	Intellectual Courage	5	0.865
	Creative Courage	5	0.865
	Followership Courage	5	0.865
HRM Entrepreneurial Behavior	Innovation	5	0.805
	Risk-Taking	5	0.805
	Proactive Behavior	5	0.805
Overall Reliability (All Items)	-	30	0.901
Overall Validity	-	-	0.949

Prepared by the researcher based on SPSS statistical program results.

5. Results and Discussion

5.1. Results

5.1.1. Dimensions of Courageous Leadership Analysis and Discussion of the Sample's Responses

The results of the analysis showed that the leadership on Courageous Leadership in the Ministry of Labor and Social Affairs is high with a overall mean of 3.74. That points to a leadership culture in which bold thinking and decisive decision-making are welcome within the organization. In terms of courageous leadership dimensions, Intellectual Courage achieved a mean total of 3.76 which is the highest mean among the dimensions that reflects the leaders' willingness to embrace new concepts and addressing issues in a logical manner and although the agreement is relative within the sample members concerning this dimension, the relative means deviation of the items representing it indicates minor differences in the organizations' perceptions towards the practices of intellectual courage.

Third was Creative Courage [mean = 3.74], suggesting that leaders support innovation and encourage the generation of new ideas, and showing a high level of agreement among members of the sample on this dimension. Followership Courage had a mean of 3.73, indicating the extent to which people will engage in, and support leadership, with some relatively more differentiation in some of the items, indicating individuals have a more differing view of this dimension.

In aggregate, these results suggest that courageous leadership is fairly prevalent in the organization, with a roughly equal distribution across the three dimensions. A very low overall coefficient of variation indicates a high level of agreement among members of the sample, confirming the robustness of the results while also amplifying the interpretation of how unambiguous courageous leadership behaviors in the workplace are exercised (See Table 3).

Table 3. Analysis and Discussion of the Sample's Responses, Dimensions of Courageous Leadership

Rank	Coefficient of Variation	Std. Deviation	Mean	Items	Dimensions	Variable
1	0.16	0.65	3.95	Q1	Intellectual Courage	Courageous Leadership
2	0.14	0.55	3.88	Q2		

Rank	Coefficient of Variation	Std. Deviation	Mean	Items	Dimensions	Variable
3	0.20	0.74	3.71	Q3	Creative Courage	
5	0.31	1.00	3.48	Q4		
4	0.16	0.61	3.75	Q5		
	0.11	0.41	3.76	Overall Mean		
5	0.21	0.75	3.58	Q6		
4	0.22	0.80	3.60	Q7		
1	0.19	0.75	3.88	Q8		
2	0.14	0.55	3.84	Q9		
3	0.18	0.69	3.80	Q10		
	0.13	0.50	3.74	Overall Mean		
4	0.12	0.50	3.55	Q11	Followership Courage	
2	0.17	0.69	3.85	Q12		
3	0.16	0.65	3.84	Q13		
1	0.32	0.89	3.98	Q14		
5	0.24	0.84	3.44	Q15		
	0.12	0.44	3.73	Overall Mean		
	0.12	0.45	3.74	Overall Variable Mean		

Prepared by the researcher based on SPSS statistical program results.

5.1.2. (H R M) Analysis and Discussion of the Sample's Opinions on the Dimensions

The analysis results showed that the level of entrepreneurial behavior among human resources at the Ministry of Labor and Social Affairs was relatively good, with an overall variable mean of 3.53, indicating a notable adoption of entrepreneurial behaviors among employees. When examining the dimensions of this variable, the innovation dimension ranked first with a mean of 3.42, reflecting a clear orientation toward adopting new ideas and encouraging creativity, with relatively consistent opinions among the sample members, despite some limited variation in certain items that suggest differences in the application of innovation across different departments.

The risk-taking dimension recorded a mean of 3.53, reflecting employees' readiness to take calculated risks and indicating greater flexibility in thinking and initiative, while some minor variance remained among the items. The proactive behavior dimension had a mean of 3.63, which reflects a good capacity among individuals to take initiative and anticipate problems, although practices varied across different teams.

Overall, these results indicate that entrepreneurial behavior has become evident and tangible within the organization, with a noticeable increase in adopting innovation, initiative, and risk-taking, reflecting a supportive organizational environment and a leadership orientation that contributes to enhancing entrepreneurial behaviors among human resources (see Table 4).

Table 4. Analysis and Discussion of the Sample's Responses, Dimensions of Human Resources Management Entrepreneurial Behavior

Management Entrepreneurial Behavior						
Rank	Coefficient of Variation	Std. Deviation	Mean	Items	Dimensions	Variable
1	0.19	0.75	3.88	Q16	Innovation	Entrepreneurial Behavior of Human Resources
3	0.28	0.88	3.23	Q17		
4	0.25	0.79	3.12	Q18		
5	0.25	0.86	3.10	Q19		
2	0.18	0.71	3.80	Q20		
	0.11	0.75	3.42	Overall Mean		
3	0.15	0.61	3.46	Q21	Risk-Taking	
1	0.25	0.88	3.42	Q22		
4	0.16	0.65	3.90	Q23		
2	0.15	0.60	3.22	Q24		
5	0.24	0.89	3.65	Q25		

Rank	Coefficient of Variation	Std. Deviation	Mean	Items	Dimensions	Variable
	0.11	0.42	3.53	Overall Mean		
3	0.19	0.74	4.06	Q26	Proactive Behavior	
5	0.17	0.71	3.88	Q27		
4	0.15	0.62	3.67	Q28		
2	0.21	0.79	3.12	Q29		
1	0.18	0.70	3.44	Q30		
	0.13	0.50	3.63	Overall Mean		
	0.11	0.55	3.53	Overall Variable Mean		

Prepared by the researcher based on SPSS statistical program results.

5.1.3. Testing and Analyzing Research Hypotheses

5.1.3.1. Testing Data Distribution

Given that the research sample size is (125), the Kolmogorov-Smirnov test was used to verify the normality of data distribution.

- For the variable Courageous Leadership, Kolmogorov-Smirnov = 0.065 with significance level (Sig.) = 0.200.
- For the variable HRM Entrepreneurial Behavior, Kolmogorov-Smirnov = 0.060 with Sig. = 0.200.

Since all significance values are greater than 0.05, the data distribution is considered normal (see Table 5).

Table 5. Data Distribution Test

Variable	Kolmogorov-Smirnov	Sig.	Distribution Type
Courageous Leadership	0.065	0.209	Normal
HRM Entrepreneurial Behavior	0.060	0.240	Normal

Prepared by the researcher based on SPSS statistical program results.

5.1.3.2. Testing Correlation Hypotheses

The relationship between Courageous Leadership and its dimensions (Intellectual Courage, Creative Courage, Followership Courage) and the dependent variable HRM Entrepreneurial Behavior was analyzed using Pearson correlation coefficient.

- Intellectual Courage and HRM Entrepreneurial Behavior. Correlation coefficient = 0.465** at significance 0.05, indicating a moderate positive correlation. This supports the hypothesis that Intellectual Courage positively affects HRM Entrepreneurial Behavior.
- Creative Courage and HRM Entrepreneurial Behavior. Correlation coefficient = 0.420** at significance 0.05, indicating a moderate positive correlation. The hypothesis is accepted.
- Followership Courage and HRM Entrepreneurial Behavior. Correlation coefficient = 0.486** at significance 0.05, indicating a moderate positive correlation. The hypothesis is accepted.
- Overall Courageous Leadership and HRM Entrepreneurial Behavior. Correlation coefficient = 0.648** at significance 0.05, showing that any positive change in Courageous Leadership is accompanied by a corresponding positive change in HRM Entrepreneurial Behavior (see Table 6).

Table 6. Correlation Hypotheses Testing

Correlation	Sig.	Independent Variable	Dependent Variable
0.465**	0.000	Intellectual Courage	
0.420**	0.000	Creative Courage	
0.486**	0.000	Followership Courage	
0.648**	0.000	Courageous Leadership	

Sample size: 125

The results of the correlation tests indicate moderate to strong positive relationships between the dimensions of courageous leadership and HRM entrepreneurial behavior. Followership Courage shows the highest correlation ($r = 0.486$), suggesting that employee engagement and support for leadership significantly enhance entrepreneurial behavior. Additionally, the significance values (Sig. = 0.000) confirm that the results are statistically significant at the 0.05 level, supporting the hypotheses that all dimensions of courageous leadership are positively associated with entrepreneurial behavior

5.1.3.3. Testing and Interpreting the Impact of Courageous Leadership on HRM Entrepreneurial Behavior

Simple Linear Regression Analysis was used to test the impact of Courageous Leadership dimensions (Intellectual, Creative, Followership Courage) on HRM Entrepreneurial Behavior.

Regression equation:

$$Y = a + \beta X + E \quad (1)$$

Where:

YYY = dependent variable

aaa = constant (value of YYY when $X=0$)

β = regression coefficient

XXX = independent variable

EEE = error term

See Table 7

Table 7. Testing Impact Hypotheses

Explanatory Variable	B (Regression Coefficient)	R ²	F Calculated	F Tabulated	Sig.	Dependent Variable
Intellectual Courage	2.369	0.216	33.957	3.94	0.000	HRM Entrepreneurial Behavior
Creative Courage	2.679	0.176	26.359	3.94	0.000	
Followership Courage	2.398	0.236	38.092	3.94	0.000	
Courageous Leadership	1.860	0.420	89.225	3.94	0.000	

Prepared by the researcher based on SPSS statistical program results.

5.1.3.4. Ranking the Strength of Influence of Leadership Dimensions

Based on R² values, the strength of influence is presented in Table 8.

Table 8. Ranking the Influence of Courageous Leadership Dimensions on HRM Entrepreneurial Behavior

Rank	R ²	Leadership Dimension
1	0.236	Followership Courage
2	0.216	Intellectual Courage
3	0.176	Creative Courage

- Followership Courage has the highest impact, explaining 23.6% of variance in HRM Entrepreneurial Behavior.
- Intellectual Courage is second with 21.6% explanatory power.
- Creative Courage ranks third with 17.6% explanatory power.

5.2. Discussions

The results of this study reveal a significant and meaningful relationship between courageous leadership and entrepreneurial behavior among human resources in the Ministry of Labor and Social Affairs. Overall, courageous leadership in the sample was relatively high (mean = 3.74), with intellectual courage scoring slightly higher (mean = 3.76), followed by creative courage (mean = 3.74) and followership courage (mean = 3.73). This distribution suggests that leaders within the ministry tend to emphasize analytical and innovative approaches while also fostering a participative and collaborative work environment that supports employee involvement.

The dimensions of entrepreneurial behavior were measured as innovation ($M = 3.73$), risk-taking ($M = 3.96$), and proactive behavior ($M = 3.11$), with an overall mean of ($M = 3.53$). These results indicate a moderate-to-high level of entrepreneurial behavior among employees. Risk-taking recorded the highest mean, suggesting that employees are relatively willing to engage in calculated risk under organizational constraints, while innovation and proactive behavior reflect a more structured and controlled approach to idea generation and initiative.

These findings are broadly consistent with recent studies in public sector management that emphasize the role of leadership in fostering employee innovation, engagement, and proactive behavior in bureaucratic environments (e.g., recent public sector leadership studies, 2023–2025). Similar research has confirmed that leadership styles characterized by empowerment, openness, and support for employee initiative significantly enhance entrepreneurial and innovative behaviors in public organizations. In this sense, the present study supports and extends these findings by demonstrating that courageous leadership, in its multidimensional form, has a measurable and significant impact on entrepreneurial behavior in a developing-country public sector context.

Correlation analysis revealed that courageous leadership dimensions have a moderate to strong positive relationship with entrepreneurial behavior dimensions. Followership courage showed the strongest correlation with entrepreneurial behavior ($r = 0.486$), indicating that employee engagement and participative leadership relationships are critical drivers of entrepreneurial behavior. Intellectual courage ($r = 0.465$) and creative courage ($r = 0.420$) also demonstrated significant positive associations, confirming that both analytical decision-making and innovation-oriented leadership behaviors contribute to fostering initiative and calculated risk-taking among employees.

Regression analysis further confirmed these relationships. Followership courage explained 23.6% of the variance in entrepreneurial behavior, intellectual courage explained 21.6%, and creative courage explained 17.6%. Overall, the model accounted for 42% of the variance in entrepreneurial behavior, which represents a substantial explanatory power in public sector organizational research. However, the results suggest that the combined effect of courageous leadership practices is more influential than isolated leadership dimensions, highlighting the importance of integrated leadership behaviors in shaping employee outcomes.

From a theoretical perspective, these findings support the relational and social interaction view of leadership, which posits that leadership effectiveness is not merely an individual attribute but a relational process that shapes employee attitudes and behaviors through empowerment, trust, and shared meaning. In this regard, courageous leadership operates as a mechanism that enables employees to express initiative, creativity, and risk-taking behavior within organizational constraints.

In terms of public sector human resource management (HRM), the findings make several important contributions. First, they highlight courageous leadership as a strategic HRM capability that should be integrated into leadership development and training programs within public organizations. Second, the results suggest that traditional compliance-oriented HRM systems should be complemented with developmental HRM practices that encourage autonomy, innovation, and controlled risk-taking. Third, the study provides empirical evidence that fostering entrepreneurial behavior in public sector employees requires leadership systems that actively promote psychological safety, participation, and empowerment.

Finally, the relatively low coefficients of variation across measures indicate consistency in perceptions among respondents, which strengthens confidence in the reliability of the findings. The alignment between high levels of courageous leadership and entrepreneurial behavior suggests the presence of an emerging empowerment-oriented organizational culture within the ministry, characterized by initiative, innovation, and participative engagement.

5.3. Recommendations

In light of these findings, the following recommendations are proposed:

- a. **Leadership Development Programs:** Deliver tailored training that boosts the capacity for intellectual and creative courage among leaders in the areas of decision making under uncertainty and innovative problem-solving methodologies.
- b. **Employee Empowerment Initiatives:** Encourage Followership Face Followership courage using the ways through which you can create participatory structures, invite the employees to engage in decision making and support collective problem solving.
- c. **Innovation Incentives:** Build official recognition and reward channels for employees who provide new suggestions or show initiative to solve issues and take measured risks.

- d. Cultural Reinforcement: Cultivate a culture wherein experimentation, learning from errors, and collective proactiveness are the norm, along with an adequate level of psychological safety to act entrepreneurially.
- e. Monitoring and Evaluation Systems: Create feedback mechanisms for embedding entrepreneurial behavior and assessing how effective the leadership interventions are in developing innovation and proactivity.
- f. Strategic Integration: Test leadership development for courage by expanding commitment to human resource and other practices and strategies so that leadership is embedded within institutional direction and promotes unwavering innovation.

6. Conclusion

Based on the study's findings, the following conclusions are drawn:

- a. The leadership was found to be quite courageous in the Ministry of Labor and Social Affairs with the intellectual, creative and followership dimensions being almost equally represented.
- b. Employee entrepreneurial behaviour is mostly good with a clear strength in proactiveness.
- c. The most positive impact on the promotion of entrepreneurial behavior is made through the courage of followership, which emphasizes the idea of working under the leadership of the firm, and supporting the leadership of the company by the employees.
- d. Entrepreneurial conduct incited by analytical and innovative leadership practices also closely relates to intellectual and creative courage.
- e. Courageous leadership collectively accounts for 42 percent of the variance in entrepreneurial behavior, demonstrating the important role it plays in stimulating innovation, risk-taking, and initiative in public institutions.
- f. Responses suggest homogenous perception of practices across leaders which is important for innovation and proactiveness to sustain overtime in the organization.

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Data Availability

The datasets generated during and/ or analyzed during the current study are available from the corresponding author on reasonable request.

Declaration on AI Use

The authors declare that no artificial intelligence (AI) or AI-assisted tools were used in the preparation of this manuscript.

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