



“The impact of entrepreneurial behavior on entrepreneurial human resources management: The mediating role of entrepreneurial orientation”

AUTHORS

Shadi Altahat 
Mohammad Alnadi 

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Shadi Altahat, Ph.D., Assistant
Professor, Department of Business
Administration, Faculty of Business,
Philadelphia University, Jordan.
(Corresponding author)

Mohammad Alnadi, Ph.D., Assistant
Professor, Department of Business
Administration, Faculty of Business,
Philadelphia University, Jordan.

Shadi Altahat (Jordan), Mohammad Alnadi (Jordan)

THE IMPACT OF ENTREPRENEURIAL BEHAVIOR ON ENTREPRENEURIAL HUMAN RESOURCES MANAGEMENT: THE MEDIATING ROLE OF ENTREPRENEURIAL ORIENTATION

Abstract

Entrepreneurial human resources management can establish competitive advantages by consistently fostering superior human resources contributions within companies. This is achieved through the development of skilled employees who are passionate about delivering quality products and services. This study sets out to explore the role of entrepreneurial orientation for small and medium-sized enterprises (SMEs), particularly the relationship between entrepreneurial behavior and entrepreneurial human resource management. An online questionnaire technique was used to meet the research objectives. The study sample consisted of 356 participants from human resource management departments from 30 SMEs in the Al-Hassan Industrial Estate (HIE) in northern Jordan. The structural equation modeling (SEM) was used to examine the data. The results displayed that entrepreneurial behavior positively and significantly impacts both entrepreneurial human resources management and entrepreneurial orientation. Additionally, entrepreneurial orientation positively impacts entrepreneurial human resources management. Entrepreneurial orientation partially mediates the relationship between entrepreneurial behavior and entrepreneurial human resources management. According to these findings, human resources management policies and practices influence the level of entrepreneurship within an organization.

Keywords

entrepreneurial behavior, entrepreneurial human resources management, entrepreneurial orientation, SMEs

JEL Classification

L31, A13, Q51

INTRODUCTION

Human resource management is considered an essential component in every project, institution, or company in general and entrepreneurship in particular. By increasing confidence and creating a friendly atmosphere among employees, the achievement of the management's desired goals and the highest productivity levels can be ensured (Hussein & Çağlar, 2019). Employees' performance and efficiency decreases when the organization neglects to invest in its resources, such as failing to provide training and development opportunities for entrepreneurial human resources. This can result in employee turnover as employees seek better job opportunities elsewhere. Human resources can enhance organizational capabilities and productivity. The organization must attract employees capable of performing efficiently and overcoming current and future obstacles. Here, the organization must encourage employee participation in decision-making (Alsafadi & Altahat, 2021). Human resources can significantly contribute to an organization's goals and profitability (Huselid, 1995).



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Entrepreneurial human resource management can be defined as a range of human resource practices that enhance innovative thinking and proactive behavior that translates newly acquired knowledge into novel products or services. Entrepreneurial human resource management supports effective performance, efficiency, and innovation (Guthrie, 2001).

Entrepreneurial behavior is a paramount factor in improving employee performance. It can be defined as the actions and thoughts of entrepreneurs. It means using initiative, identifying opportunities, innovating, and taking measured risks to add value. Entrepreneurial behavior encompasses the methods and practices entrepreneurs employ in their work, reflecting their personalities and the nature of their performance (Alsafadi et al., 2020). Among the practices and behaviors that align with entrepreneurial work are knowledge sharing, approaching work with passion and enthusiasm, humility, recognizing other's contributions, maintaining positive and friendly interactions, and dedicating time to work.

The entrepreneurial orientation arose from recognizing that organizations can be considered actors in business. To foster entrepreneurship within and outside an organization, the executive managers must implement strategies and decisions that promote entrepreneurship. This requires designing systems and procedures to enhance organizational performance (Zehir et al., 2015). For an organization to possess an entrepreneurial characteristic or leadership attitude, it must be supported by a system defined by top management (Fatoki, 2012).

1. LITERATURE REVIEW AND HYPOTHESES

Entrepreneurial behavior is a purposeful conduct rooted in social responsibility. An entrepreneurial individual thrives on originality and creativity driven by the novelty and modernity of ideas and the ability to effectively implement them through sound management. Being the base of the idea, the individual will have a sense of responsibility, decision-making compatibility, and a supervisory role in entrepreneurial behavior (Andersson, 2011).

Entrepreneurial behavior lies in the employee's inclination to bring about specific changes fueled by invention and innovation. Anything they introduce to their unique work has the potential to impact the company's advantage amongst competitors, drive profits, and contribute to the company's longevity in the market (Baron, 2009). Entrepreneurial behavior involves a relentless pursuit of innovation and change in the organization. This is facilitated by the company's encouragement and support of individual initiatives to bring about change and achieve employee job satisfaction. Therefore, they will have a heightened sense of responsibility, decision-making, and active involvement in supervising entrepreneurial ventures (Altahat et al., 2023; Bird et al., 2012).

Additionally, entrepreneurial behavior entails continually searching for new information while discarding outdated information. It involves understanding and confronting the challenges and obstacles, enabling the organization to respond to potential threats. Quick alignment with the organization's goals is imperative, as this behavior empowers employees to combat threats, ensuring the organization's resilience and competitiveness (Fatoki, 2012).

Moreover, entrepreneurial behavior encompasses the desire to achieve the organization's entrepreneurial objectives and a readiness to take calculated risks. These risks should be studied to avoid jeopardizing the work, utilizing effective systems based on accurate information to anticipate developments. Therefore, the organization must foster this behavior for its continued growth (Altahat & Alsafadi, 2021).

On the other hand, human resources management includes the full scope of activities to establish and develop the relationship between the company and its employees. Through the implementation of programs, a company can increase the efficiency and effectiveness of its workforce while adhering to established regulations and procedures to pursue the company's objectives. This significantly improves organizational performance (Abu-Jalil et al., 2023; Almaaitah et al., 2020).

Entrepreneurial companies rely heavily on human resource management as it works on providing the necessary skills, talent, competencies, and workforce organization that improves the production process and overall performance (Boxall & Purcell, 2008). The entrepreneurial human resources department seeks to improve and enhance organizational performance and effectiveness. This commitment stems from its mission to seek creativity and innovation and attract, preserve, and develop entrepreneurial talents, all of which contribute to the organization's competitive advantage. The presence of entrepreneurial talent greatly aids in achieving this, as the company will be proactive in seizing market opportunities ahead of competing organizations (Baron, 2003).

In order to achieve a great return on investment, the process of entrepreneurial human resource planning must be taken into consideration, as it contributes to training and developing the human resource, which will reflect positively on the organization as a whole as it results in improved production, job satisfaction, and enhanced employee capabilities. Companies should focus on the planning process and implement this process with the strategies devised by the entrepreneurial human resources management department (Dabić et al., 2011).

While human resource management and entrepreneurship are individually recognized and established fields, their integration has become a current trend (Katz et al., 2001). Human resource management practices are regarded as critical managerial activities among all other variables that may influence entrepreneurial outcomes (Morris & Jones, 1993).

Entrepreneurial orientation has garnered significant attention among academics in the literature on innovation and entrepreneurship (Wales et al., 2013; Wales et al., 2021). Entrepreneurial orientation has become an essential topic in entrepreneurship (Rauch et al., 2009; Runyan et al., 2012). It is defined as a set of activities, processes, and practices that guide decisions to enter new markets or introduce new products by offering innovative products, services, and business models that did not exist before in the market and have not been exploited by any other organization or company (Covin & Wales, 2019).

Entrepreneurial orientation holds a significant place in the entrepreneurship literature, having emerged over three decades ago, signifying its importance (Gupta, 2015). It can be described as the strategy followed by the company or organization, highlighting an entrepreneurship orientation and the distinct aspects of leadership in the decision-making process regarding patterns, methods, and activities (Mahmood & Hanafi, 2013). It also reflects a company's inclination to adopt creative and proactive behaviors, embrace calculated risks, identify market opportunities, and develop new services and products to ensure its survival and continuity (Eijdenberg et al., 2019).

Entrepreneurial orientation refers to an individual's innate desire and determination to pursue independent and self-initiated endeavors. It is mainly embodied in establishing a private institution, influenced by various external factors. This orientation involves embracing proactive and creative behaviors, a willingness to take risks, a sense of independence, and a strong drive for achievement (Campos & Valenzuela, 2013).

Scholars largely characterize entrepreneurial organizations by innovation, risk-taking, and proactiveness. Innovativeness signifies a propensity for embracing fresh ideas, conducting experiments, and employing creative methods. This characteristic reflects the strategic position of owners and managers in such organizations. They are known for their high level of risk and the tendency to introduce and develop new and innovative goods and services to the market through a series of interconnected decisions (Lumpkin & Dess, 1996).

Proactiveness is the capability to predict and react to changes within the business context. It is an approach to strategy that enables businesses to maintain an advantageous position over competitors and understand unexplored opportunities (Aloulou & Fayolle, 2005).

Risk-taking involves a company's willingness to engage in activities that could yield either positive or negative implications. Organizations that embrace risk-taking are often eager to make new investments in projects despite the possibility of failure (Covin & Slevin, 1989).

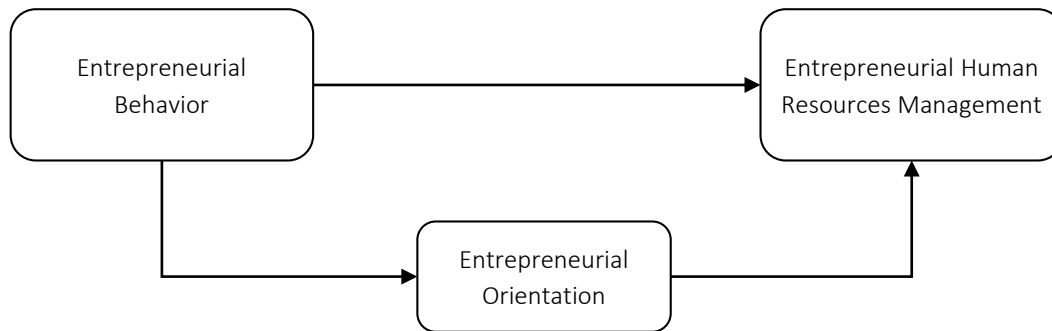


Figure 1. Theoretical framework

Entrepreneurial direction is the organization’s or company’s decision, strategy, method, or action to achieve an entrepreneurial goal. This typically involves creating a product or service that benefits the company in pursuing a specific goal. In this context, the organization focuses on entrepreneurial work and dispensing with conventional practices (Lumpkin & Dess, 2001).

Considering the theoretical framework (Figure 1) and the established variables, this study aim to investigate the mediating role of entrepreneurial orientation in the impact of entrepreneurial behavior on entrepreneurial human resources management.

The following hypotheses are built based on the literature review:

- H1: Entrepreneurial behavior positively impacts entrepreneurial human resources management.*
- H2: Entrepreneurial behavior positively impacts entrepreneurial orientation.*
- H3: Entrepreneurial orientation positively impacts entrepreneurial human resources management.*
- H4: Entrepreneurial orientation mediates the relationship between entrepreneurial behavior and entrepreneurial human resources management.*

2. METHODOLOGY

This study contains three variables. The independent variable is entrepreneurial behavior, the dependent variable is entrepreneurial human re-

source management, and the mediating variable is entrepreneurial orientation. SMEs are companies in which the revenue, the value of the assets, or the number of employees do not exceed specific thresholds. The definition of SMEs differs from one country to another and from one economic organization to another, according to the sector in which they operate. Regardless, SMEs need entrepreneurial human resources to operate.

In this instrument, the questions are scored using a 5-point Likert scale, with 1 standing for “strongly disagree” and 5 for “strongly agree.” The study employed an online survey to gather data from the study sample (Jong et al., 2015). The dimensions of innovation, creativity, proactiveness, and risk-taking were used to measure entrepreneurial behavior. The measurements of Fadda (2018) were adopted: innovativeness, proactiveness, risk-taking, competitiveness, and autonomy. The measure of Moustaghfir et al. (2020) was adopted to measure entrepreneurial human resources management, which is entrepreneurial employment, entrepreneurial training, entrepreneurial development, entrepreneurial participation, entrepreneurial motivation, the performance of entrepreneurial workers, and entrepreneurial talents.

The survey link was sent to six hundred ninety-five participants from thirty Al-Hassan Industrial Estate (HIE) SMEs in northern Jordan. HIE is in the Irbid Governorate, seventy-two kilometers (km) from the capital Amman. Four hundred eleven questionnaires were received with a response rate of 59.1%. It took over seven days for the data to be collected as the employees lacked time. After screening and preliminary data analysis, three hundred fifty-six responses were selected for further analysis. The pretesting and pilot

testing stages were carried out before collecting actual data. The results of the pilot testing show that every variable met the reliability requirement. The measurement model's validity and reliability were tested through exploratory factor analysis, showing that the constructs' reliability according to Cronbach's alpha was greater than 0.7. Additionally, the composite dependability index supported this reliability. Average variance extracted (AVE) values greater than 0.5 for each construct also show convergent validity; the factor loadings are higher than 0.5 and significant.

The study applied structural equation modeling, including path analysis, composite reliability (CR), confirmatory factor analysis (CFA), and average variance extracted (AVE). The statistical software used for SEM was AMOS (Analysis of Moment Structures). CR and AVE were conducted to test reliability. Discriminant validity was employed to assess the potential bias associated with common methods. Discriminant validity was ensured by implementing confidentiality measures to decrease common method bias.

3. RESULTS AND DISCUSSION

Table 1 shows correlations, SD, and M between the variables. Entrepreneurial behavior was positively associated with entrepreneurial human resource management ($r = 0.341$) and positively correlated with entrepreneurial orientation ($r = 0.262$). Human resource management was positively associated with entrepreneurship and positively impacted by entrepreneurial orientation. These findings support H1, H2 and H3.

The findings presented in Table 2 show that (α) has exceeded the threshold (0.60). In Cronbach's alpha reliability test (α), the measurement model's convergent validity was also experienced, and the CR of the scaled variables was seen to exceed the threshold of 70%. AVE also exceeded the threshold of 50%.

Table 3. Factor loadings

| Variable | Item | Load | M | SD |
|--|---|-------|------|------|
| Entrepreneurial Behavior | Q1. Innovation | 0.952 | 4.18 | .701 |
| | Q2. Creativity | 0.930 | 4.13 | .690 |
| | Q3. Proactiveness | 0.871 | 4.22 | .668 |
| | Q4. Risk-taking | 0.688 | 4.18 | .681 |
| | Q5. The regulatory dimension | 0.856 | 4.10 | .701 |
| | Q6. The cognitive dimension | 0.750 | 4.08 | .688 |
| | Q7- The normative dimension | 0.850 | 4.00 | .660 |
| Entrepreneurial Human Resources Management | Q1. Entrepreneurial employment | 0.606 | 4.03 | .789 |
| | Q2. Entrepreneurial training | 0.926 | 3.96 | .678 |
| | Q3. Entrepreneurial development | 0.708 | 3.98 | .666 |
| | Q4. Entrepreneurial participation | 0.585 | 3.72 | .670 |
| | Q5. Entrepreneurial motivation | 0.790 | 3.65 | .640 |
| | Q6. Entrepreneurial employees' performance | 0.592 | 3.81 | .701 |
| | Q7. Entrepreneurial talents | 0.727 | 3.93 | .684 |
| Entrepreneurial Orientation | Q1. Innovativeness | 0.832 | 3.85 | .642 |
| | Q2. Proactiveness | 0.847 | 3.91 | .688 |
| | Q3. Risk-taking | 0.757 | 3.85 | .711 |
| | Q4. Competitiveness | 0.733 | 3.81 | .755 |
| | Q5. Autonomy | 0.766 | 3.82 | .721 |
| | Q6. An entrepreneurial orientation emphasizes the opportunity | 0.756 | 3.74 | .755 |

Table 1. Standard deviation, correlations, and means

| Variable | 1 | 2 | 3 | M | SD |
|---|----------|---------|---------|------|-------|
| 1. Entrepreneurial Behavior | 1 | 0.341** | .262 ** | 3.21 | 0.572 |
| 2. Entrepreneurial Human Resources Management | 0.341 ** | 1 | 0.611** | 2.91 | 0.518 |
| 3. Entrepreneurial Orientation | 0.262 ** | 0.611** | 1 | 2.91 | 0.560 |

Note: N = 356, ** means Pearson correlations are significant; $p < 0.001$.

Table 2. Cronbach's alpha (α), average variance extracted (AVE), and composite reliability (CR)

| Variables | Entrepreneurial Behavior | Entrepreneurial Human Resources Management | Entrepreneurial Orientation |
|--------------------|--------------------------|--|-----------------------------|
| Alpha (α) | 0.921 | 0.859 | 0.931 |
| CR | 0.943 | 0.885 | 0.879 |
| AVE | 0.652 | 0.530 | 0.620 |

Table 4. Goodness of fit

| | Measurement Model | Structural Model | Cut Off Points |
|--|----------------------|----------------------|-----------------------------|
| | $\chi^2 = 751.6240$ | $\chi^2 = 751.6240$ | |
| 1. Degree of freedom | Df = 318, $p = 0.00$ | Df = 318, $p = 0.00$ | |
| 2. Goodness of fit | (GFI) = 0.746 | (GFI) = 0.765 | 1 = perfect fit |
| 3. Root mean square error of approximation (RMSEA) | (RMSEA) = 0.0600 | (RMSEA) = 0.0600 | Good fit < 0.08 |
| 4. Comparative Fit Index (CFI) | (CFI) = 0.946 | (CFI) = 0.946 | 1 = perfect fit |
| 5. Standardized Root Mean Square Residual (SRMR) | (SRMR) = 0.0373 | (SRMR) = .0373 | Good fit < 0.08 |
| 6. Normed Fit Index (NFI) | NFI = 0.910 | NFI = 0.910 | 1 = perfect fit |
| 7. Relative χ^2 | (CMIN/df) = 2.244 | CMIN/df = 2.244 | Good fit between 1 and 5 |
| 8. Common Method Bias | (CMP) = 0.410 | | Does not affect data < 0.50 |

As shown in Table 3, the confirmatory factor analysis (CFA) reveals factor loadings ranging from 0.585 to 0.952. This indicates the significance and acceptability of all the results.

Both measure and structural model were assessed after testing the goodness of fit in Table 4, validating the fitness of the proposed model with AMOS software via the use of CFA and SEM. The measurement model used these three latent variables: entrepreneurial behavior, entrepreneurial human resource management, and entrepreneurial orientation. They include thirty indicators (fourteen items of entrepreneurial behavior, ten of entrepreneurial human resource management, and six of entrepreneurial orientation).

Table 4 shows there was a good fit with the data exercising the partially mediated model. Additionally, after the application of the full mediation model, it did not show any clear advance in the fit further than the partially mediated model. It, however, fits the data, which indicates that entrepreneurial behavior has a positive and significant relationship with entrepreneurial human resource management. The partially mediated model is more suitable for analyzing this proposed model.

The findings in Table 5 indicate that the path coefficient between entrepreneurial behavior and entrepreneurial human resource management ($b = -0.431, p \leq 0.001$) was significant and positive. It also shows R^2 (entrepreneurial human resource

management) = 18.0 % of the variance, so H1 is supported, which agrees with Surucu and Sesen (2019) and Umana et al. (2021). The results additionally explore that entrepreneurial behavior influenced entrepreneurial orientation ($b = 0.379, p \leq 0.001$) and clarify R^2 (entrepreneurial orientation) = 11% of the variance; thus, H2 is supported, which agrees with Chen et al. (2011) and Pearce et al. (1997). Entrepreneurial orientation's influence on entrepreneurial human resource management ($b = -0.769, p \leq .001$) was significant and positive, therefore H3, as expected, is supported and clarifies R^2 (entrepreneurial human resource management) = 50% of the variance; this agrees with Irwin et al. (2018), Moustaghfir et al. (2020), and Shahzad et al. (2022).

H4 hypothesized that entrepreneurial orientation mediated the correlation between entrepreneurial behavior and employee entrepreneurial human resource management. When entrepreneurial orientation (the mediator variable) was presented with the model, the influence of entrepreneurial behavior on entrepreneurial human resource management increased while being positive and significant. There was a significant but indirect impact on the link between entrepreneurial behavior and entrepreneurial human resource management ($b = .400, p \leq .001$). Therefore, H4 is supported since the relationship between entrepreneurial behavior and entrepreneurial human resource management was significant ($b = .336, p \leq .001$); thus, the partially mediated model is supported.

Table 5. Direct, indirect, and total effects of the proposed model

| Exogenous Variables | Endogenous Variables | Total Effect | Direct Effect | Indirect Effect |
|-----------------------------|---|--------------|---------------|-----------------|
| Entrepreneurial Behavior | Entrepreneurial Human Resource Management | 0.336 | 0.136 | 0.400 |
| Entrepreneurial Behavior | Entrepreneurial Orientation | 0.379 | 0.379 | 0.000 |
| Entrepreneurial Orientation | Entrepreneurial Human Resource Management | 0.769 | 0.769 | 0.000 |

CONCLUSION

This study sought to examine the importance of entrepreneurial behavior within human resources, as it must be strengthened and developed through creativity, innovation, and the encouragement of human resources in SMEs toward an entrepreneurial orientation. The technical and economic revolution in business is linked to contemporary concepts and approaches such as entrepreneurial orientation, entrepreneurial human resource management, and entrepreneurial behavior, which have significantly impacted SMEs. Entrepreneurial behavior positively correlates with entrepreneurial human resources management and entrepreneurial orientation. Entrepreneurial orientation, in turn, positively impacts entrepreneurial human resource management, leading to an essential relationship between entrepreneurial behavior and all other variables. Small and medium businesses are the primary business sectors for job generation, wealth distribution, evaluation of the economy, innovation, and economic growth. Entrepreneurial orientation significantly depends on the SME sector to survive, be sustainable, and achieve competitive advantage.

These findings highlight the significance of applying entrepreneurial behavior with entrepreneurial orientation and human resource management to improve employee performance and increase the output of all SMEs in the Al-Hassan Industrial Estate (HIE). Furthermore, the results support the necessity of adopting the aims of entrepreneurial orientation to plan the new trend of integrating human resource management and entrepreneurship. The central management should set up specialized administrative divisions and provide professional advice to employ entrepreneurial approaches to oversee all processes with specialized training programs.

Additional research is advised to obtain more information about the entrepreneurial approach for all of these variables in Jordan and other countries. The study only used the proposed model in Jordan, a singular, underdeveloped country. Therefore, broadening the results to other nations should only be done after cautious study. Future studies could extend the model's reach to make it easily applicable to other nations, regardless of cultural and historical similarities. When that is achieved, the data set could be used to identify regional or geographic disparities. Since this study focuses on Jordanian small and medium-sized firms, the results may differ from those obtained from studies of other industries operating in different environments.

AUTHOR CONTRIBUTIONS

Conceptualization: Shadi Altahat.
 Data curation: Mohammad Alnadi.
 Formal analysis: Shadi Altahat.
 Investigation: Shadi Altahat.
 Methodology: Shadi Altahat.
 Project administration: Mohammad Alnadi.
 Resources: Mohammad Alnadi.
 Supervision: Shadi Altahat.
 Validation: Mohammad Alnadi.
 Visualization: Mohammad Alnadi.
 Writing – original draft: Shadi Altahat.
 Writing – review & editing: Mohammad Alnadi.

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