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# THE IMPACT OF HUMAN RESOURCE FLEXIBILITY ON ENTREPRENEURSHIP: THE MEDIATING ROLE OF QUALITY OF WORK LIFE AT JORDANIAN TELECOMMUNICATIONS COMPANIES

**Ghaith Ahmad Salem Al-Khalaileh**

*PhD Student in Accounting, World Islamic Sciences and Education University (WISE).  
Email: 6220501022@std.wise.edu.jo*

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Corresponding Author: Ghaith Ahmad Salem Al-Khalaileh  
(6220501022@std.wise.edu.jo)

## ABSTRACT

*This study investigates the impact of human resource flexibility on entrepreneurship in Jordanian telecommunications companies, while examining the mediating role of quality of work life. Drawing on strategic human resource management and entrepreneurial orientation literature, the study adopts a quantitative approach using survey data collected from senior and middle-level managers. Structural Equation Modeling based on Partial Least Squares (PLS-SEM) was employed to analyze the data. The findings reveal that human resource flexibility has a significant positive effect on both quality of work life and entrepreneurship. Additionally, the quality of work life significantly influences entrepreneurship and partially mediates the relationship between human resource flexibility and entrepreneurship. The study contributes to the literature by providing empirical evidence from an emerging market context and offers practical implications for organizations seeking to enhance entrepreneurial behavior through flexible human resource practices.*

## 1. INTRODUCTION

Contemporary business organizations, particularly those operating in technology-intensive service sectors such as telecommunications, have experienced rapid transformations driven by globalization, digital advancement, intensified competition, and changing customer expectations. These transformations have increased pressure on organizations to enhance their organizational capabilities, especially human capabilities, to enable rapid adaptation to environmental changes and to achieve sustainability and growth in uncertain and dynamic environments (Wright & Snell, 1998; Lakshman et al., 2022).

Within this context, human resource flexibility has emerged as a modern managerial approach that enhances organizational responsiveness to sudden changes through the development of a multi-skilled workforce capable of adjusting behaviors and supported by flexible human resource practices that promote adaptation and innovation. Recent management literature emphasizes that human resource flexibility, encompassing skill flexibility, behavioral flexibility, and HR practices flexibility, represents a critical factor in strengthening organizational resilience and achieving strategic flexibility (Bhattacharya et al., 2005; Chang et al., 2013; Aldiabat & Alzoubi, 2024).

Accordingly, the need arises to examine the relationship between human resource flexibility and entrepreneurship, with particular emphasis on the mediating role of quality of work life, especially within Jordanian telecommunications companies that operate in highly competitive and rapidly changing environments. This study seeks to propose an integrated model explaining how human resource flexibility contributes to entrepreneurial behavior through the enhancement of quality of work life, thereby addressing a clear research gap in the Arabic literature and offering both theoretical and practical contributions to decision-makers in this vital sector.

### 1.1 Research Problem and Questions

Despite the growing scholarly attention to human resource flexibility and entrepreneurship as separate constructs, previous empirical findings reveal inconsistencies regarding the nature of the relationship between them, particularly in organizational environments characterized by high work pressure and accelerated technological change. Recent studies suggest that this

relationship may not necessarily be direct, but rather influenced by internal organizational factors that transform organizational flexibility into actual entrepreneurial behavior among employees (Wang et al., 2023).

In this regard, quality of work life has emerged as a significant organizational variable influencing employee attitudes and behaviors through the provision of work-life balance, supportive work environments, organizational justice, and job security. Contemporary research confirms that quality of work life plays a central role in enhancing job satisfaction, organizational commitment, and innovation, which are essential components for fostering entrepreneurial behavior within organizations (Sirgy & Lee, 2016; Hayman, 2010; Edeh et al., 2024).

However, a noticeable research gap exists in the Arabic literature concerning the mediating role of quality of work life in the relationship between human resource flexibility and entrepreneurship, particularly within Jordanian telecommunications companies. Accordingly, the main research question of this study is formulated as follows:

What is the impact of human resource flexibility on entrepreneurship, considering quality of work life as a mediating variable in Jordanian telecommunications companies?

The following sub-questions are derived from the main research question:

- What is the level of relative importance of human resource flexibility dimensions (skill flexibility, behavioral flexibility, and HR practices flexibility) in Jordanian telecommunications companies?
- What is the level of relative importance of entrepreneurship dimensions (innovation, proactiveness, and risk-taking) in Jordanian telecommunications companies?
- What is the level of relative importance of quality of work life in Jordanian telecommunications companies?
- What is the impact of human resource flexibility on entrepreneurship in Jordanian telecommunications companies?
- What is the impact of human resource flexibility on quality of work life in Jordanian telecommunications companies?
- What is the impact of quality of work life on entrepreneurship in Jordanian telecommunications companies?
- What is the mediating role of quality of work life in the relationship between human resource flexibility and entrepreneurship in Jordanian telecommunications companies?

## 2. LITERATURE REVIEW AND PREVIOUS STUDIES

### 2.1 Introduction

This chapter presents a comprehensive review of previous studies related to the main variables of the current research, namely human resource flexibility, quality of work life, and entrepreneurship. The review covers both Arabic and international literature in order to identify prevailing research trends, compare empirical findings, and determine the research gap that the present study seeks to address.

#### Previous Arabic Studies

Al-Khraisat and Al-Shaar (2024) conducted a study entitled 'Human Resource Management Flexibility and Its Impact on Enhancing Entrepreneurship in Arab Service Organizations'. The study aimed to analyze the impact of human resource management flexibility on entrepreneurial behavior within Arab service organizations, focusing on skill flexibility, behavioral flexibility, and flexible HR practices. Using a descriptive-analytical approach and questionnaire-based data collection, the findings revealed a statistically significant positive effect of human resource flexibility on entrepreneurial behavior, particularly innovation and proactiveness. These findings are consistent with the current study in highlighting the importance of organizational flexibility in fostering entrepreneurship.

Zuhair and Salman (2024), in their study 'The Impact of Human Resource Flexibility on Strategic Creativity in Arab Organizations', examined the role of human resource flexibility in enhancing strategic creativity. The study, which employed a descriptive-analytical methodology across service and industrial organizations, found that behavioral and skill flexibility significantly contribute to employees' adaptability to organizational and technological changes and enhance their participation in innovative activities. These results support the present study's theoretical orientation linking flexibility to entrepreneurial behavior.

Al-Janabi et al. (2021) investigated 'The Role of Entrepreneurial Behavior in Enhancing Institutional Performance in Arab Organizations'. Their study emphasized innovation, proactiveness, and risk-taking as key dimensions of entrepreneurial behavior. The findings demonstrated a positive relationship between entrepreneurial behavior and sustainable competitive advantage, reinforcing the importance of entrepreneurship as a dependent variable, which aligns with the objectives of the current study.

Al-Najjar and Al-Alifi (2022) examined entrepreneurship as a strategic approach to enhancing competitiveness in Arab organizations. The study concluded that successful entrepreneurial orientation requires a flexible organizational environment that encourages initiative and participative decision-making. Innovation and proactiveness were identified as decisive factors in achieving organizational growth, which is consistent with the conceptual framework of the present study.

Al-Kindi and Suleiman (2025) explored 'Quality of Work Life and Its Impact on Enhancing Innovation in Arab Institutions'. Using a descriptive-analytical approach, the study found that improving quality of work life contributes significantly to job satisfaction and innovative behavior. These findings support the inclusion of quality of work life as a mediating variable in the current study.

#### Previous International Studies

Wright and Snell (1998) proposed a foundational framework linking strategic fit and flexibility in human resource management, emphasizing the importance of aligning HR practices with dynamic environmental requirements. Bhattacharya et al. (2005) further conceptualized human resource flexibility as a strategic organizational resource that enhances firm performance by enabling rapid reconfiguration of human capital.

Chang et al. (2013) examined flexibility-oriented HRM systems and found that such systems enhance absorptive capacity, market responsiveness, and firm innovativeness. Similarly, Lakshman et al. (2022) provided empirical evidence that flexibility-oriented HRM practices positively influence innovation outcomes in dynamic business environments.

Sirgy and Lee (2016) emphasized the role of quality of work life in improving employee well-being and organizational outcomes, while Hayman (2010) demonstrated that flexible work arrangements contribute to employee satisfaction and work-life balance. These studies highlight the explanatory role of quality of work life in linking HR practices to positive behavioral outcomes.

#### Contribution of the Current Study

The current study distinguishes itself from previous research by integrating human resource flexibility and entrepreneurship within a single conceptual framework while empirically testing the mediating role of quality of work life. Moreover, it applies Partial Least Squares Structural Equation Modeling (PLS-SEM) to Jordanian telecommunications companies, thereby offering a methodological and contextual contribution to the Arabic literature.

### 3. THEORETICAL FRAMEWORK

#### 3.1 *Introduction*

This chapter provides an analytical presentation of the theoretical framework underpinning the variables of the current study, namely human resource flexibility as the independent variable, entrepreneurship as the dependent variable, and quality of work life as the mediating variable. The discussion is grounded in classical and contemporary management literature and aims to establish a solid conceptual foundation for examining the relationships among the study variables within the context of Jordanian telecommunications companies.

#### 3.2 *Human Resource Flexibility*

##### 3.2.1 *Importance of Human Resource Flexibility*

Human resource flexibility has emerged as a strategic concept in contemporary management due to profound changes in business environments, particularly within technology-driven service sectors. Globalization, digital transformation, accelerated innovation, and intensified competition have increased organizational reliance on adaptable and responsive human capital. Consequently, organizations are increasingly required to develop flexible human resources capable of responding effectively to environmental uncertainty and achieving sustainable performance (Wright & Snell, 1998; Lakshman et al., 2022).

In the telecommunications sector, the importance of human resource flexibility is further amplified due to heavy dependence on knowledge, technology, and skilled human capital. From the researcher's perspective, flexibility represents a decisive factor in sustaining competitiveness and supporting innovation within this sector.

##### 3.2.2 *Concept of Human Resource Flexibility*

Wright and Snell (1998) defined human resource flexibility as the organization's ability to align employee skills, behaviors, and human resource practices with changing strategic requirements. Bhattacharya et al. (2005) further conceptualized human resource flexibility as a strategic organizational resource that enables firms to reconfigure their human capital in ways that enhance performance and reduce operational risks.

The present study views human resource flexibility as an integrated system encompassing human capabilities, behavioral adaptability, and institutional HR practices. Accordingly, it should be

understood within its organizational and strategic context rather than as isolated managerial practices.

#### 3.2.3 *Dimensions of Human Resource Flexibility*

Human resource flexibility consists of three primary dimensions as identified in management literature:

##### a. *Skill Flexibility*

Skill flexibility refers to employees' ability to acquire and utilize a diverse range of skills and knowledge, enabling them to perform multiple tasks and transition across different job roles according to organizational needs (Bhattacharya et al., 2005). Empirical evidence suggests that multi-skilling and continuous training significantly enhance innovation and responsiveness to environmental change (Lakshman et al., 2022).

##### b. *Behavioral Flexibility*

Behavioral flexibility reflects employees' capacity to adjust their behaviors and work styles in response to varying organizational situations. It supports teamwork, problem-solving, and openness to change, which are essential elements for entrepreneurial behavior (Chang et al., 2013).

##### c. *HR Practices Flexibility*

HR practices flexibility refers to management's ability to design and implement adaptable HR policies related to recruitment, training, performance appraisal, and reward systems in alignment with strategic and environmental changes (Aldiabat & Alzoubi, 2024). This dimension provides the institutional framework supporting other forms of human resource flexibility.

#### 3.3 *Entrepreneurship*

##### 3.3.1 *Importance of Entrepreneurship*

Entrepreneurship is widely recognized as a key driver of organizational growth, innovation, and competitive advantage in dynamic business environments. Organizations that adopt an entrepreneurial orientation are better positioned to identify opportunities, respond proactively to market changes, and achieve superior performance (Covin & Wales, 2019; Kraus et al., 2018).

##### 3.3.2 *Concept of Entrepreneurship*

Lumpkin and Dess (1996) defined entrepreneurship as a pattern of organizational behavior characterized by innovation, proactiveness, and risk-taking. Covin and Wales (2019) further emphasized that entrepreneurial orientation

represents an integrated strategic posture that enhances organizational competitiveness.

### 3.4 Quality of Work Life

#### 3.4.1 Importance of Quality of Work Life

Quality of work life has become a central concept in human resource management due to its role in improving employee well-being, job satisfaction, and positive work behaviors. Prior research confirms that supportive work environments and work-life balance contribute significantly to organizational effectiveness (Sirgy & Lee, 2016).

#### 3.4.2 Concept of Quality of Work Life

Walton (1973) conceptualized quality of work life as a set of organizational conditions that ensure a fair and humanized work environment. Sirgy and Lee (2016) defined it as employees' perceived satisfaction of their professional, psychological, and social needs within the workplace.

From the researcher's perspective, quality of work life represents a critical explanatory mechanism through which flexible human resource practices are translated into entrepreneurial outcomes.

#### Theoretical Integration of Study Variables

The theoretical framework of the current study assumes a direct effect of human resource flexibility on entrepreneurship, as well as an indirect effect through quality of work life. Human resource flexibility is expected to enhance quality of work life by fostering supportive, fair, and adaptive work environments, which in turn stimulate entrepreneurial behavior. Accordingly, quality of work life functions as a mediating variable that explains the mechanism linking human resource flexibility to entrepreneurship.

## 4. METHODOLOGY

### 4.1 Introduction

This chapter presents the methodological framework adopted in the current study. It outlines the research design, study population and sample, unit of analysis, data collection methods, research instrument, validity and reliability procedures, and the statistical techniques used to analyze the data and test the study hypotheses.

### 4.2 Research Design

The study adopts a quantitative research design based on a descriptive-analytical approach. This design is suitable for examining relationships among variables and testing hypotheses using empirical data collected from the study population. The

research model is structured to examine both direct and indirect effects among the variables through a mediating framework.

### 4.3 Study Population

The study population consists of senior and middle-level managers working in Jordanian telecommunications companies. This group was selected due to its direct involvement in managerial decision-making, human resource practices, and the implementation of entrepreneurial initiatives within their organizations.

### 4.4 Study Sample

A stratified random sampling technique was employed to ensure adequate representation of different companies and managerial levels within the study population. The unit of sampling included general managers, department managers, section heads, and human resource managers.

The sample size was determined based on statistical guidelines appropriate for Partial Least Squares Structural Equation Modeling (PLS-SEM). A target sample size ranging between 300 and 350 respondents was considered adequate. A total of 238 valid questionnaires were ultimately collected and deemed suitable for statistical analysis, which meets the minimum requirements for PLS-SEM analysis (Hair et al., 2019).

### 4.5 Unit of Analysis

The unit of analysis in this study is the individual manager at the senior or middle management level within Jordanian telecommunications companies. Data were collected based on respondents' perceptions regarding human resource flexibility, quality of work life, and entrepreneurship within their organizations.

### 4.6 Data Collection Methods

Primary data were collected using a structured questionnaire specifically developed for the purposes of this study. The questionnaire was distributed both electronically and in paper form, depending on organizational accessibility and respondent availability. Participants were assured that their responses would remain confidential and used solely for academic research purposes.

### 4.7 Research Instrument

The questionnaire was designed based on an extensive review of relevant literature related to human resource flexibility, quality of work life, and entrepreneurship. It consisted of four main sections.

The first section included demographic variables such as gender, age, educational level, years of experience, managerial level, department, and company name.

The second section measured human resource flexibility as the independent variable through three dimensions: skill flexibility, behavioral flexibility, and HR practices flexibility. The third section measured quality of work life as the mediating variable, focusing on work environment, work-life balance, organizational justice, managerial support, and job security. The fourth section measured entrepreneurship as the dependent variable through the dimensions of innovation, proactiveness, and risk-taking.

All questionnaire items were measured using a five-point Likert scale ranging from (1 = Strongly Disagree) to (5 = Strongly Agree), which is widely used in management research due to its reliability and ease of interpretation (Bougie & Sekaran, 2019).

#### 4.8 Validity and Reliability

To ensure content validity, the initial version of the questionnaire was reviewed by a panel of academic experts specialized in business administration, human resource management, and quantitative research methods. Their feedback was incorporated to improve clarity, relevance, and comprehensiveness.

Reliability was assessed using Cronbach's Alpha coefficient to evaluate internal consistency for each construct and for the overall instrument. A Cronbach's Alpha value of 0.70 or higher was considered acceptable. In addition, composite reliability (CR) was calculated during measurement model assessment using SmartPLS to further support instrument reliability (Hair et al., 2019).

#### 4.9 Statistical Analysis Methods

Data analysis was conducted using SPSS and SmartPLS software packages. Descriptive statistics were employed to analyze demographic characteristics and response trends, including frequencies, percentages, means, and standard deviations.

Inferential statistical techniques were applied using Partial Least Squares Structural Equation Modeling (PLS-SEM). This approach was used to assess the measurement model through reliability and validity testing, and to evaluate the structural model by examining path coefficients, t-values, and significance levels using the bootstrapping procedure. Multicollinearity was assessed using the Variance Inflation Factor (VIF).

## 5. DATA ANALYSIS AND HYPOTHESES TESTING

### 5.1 Introduction

This chapter presents the statistical analysis of the data collected from the study sample and the results of hypotheses testing. The analysis was conducted using descriptive and inferential statistical techniques, supported by Partial Least Squares Structural Equation Modeling (PLS-SEM), in order to examine the proposed relationships among the study variables.

### 5.2 Descriptive Analysis of Study Variables

#### 5.2.1 Human Resource Flexibility

The descriptive analysis results indicate that the overall level of human resource flexibility in Jordanian telecommunications companies was relatively high, with an overall mean score of 3.78 and a standard deviation of 0.61. Skill flexibility recorded a mean of 3.82 (SD = 0.64), behavioral flexibility recorded a mean of 3.76 (SD = 0.59), and HR practices flexibility recorded a mean of 3.74 (SD = 0.60). These findings reflect the emphasis placed by telecommunications companies on developing employee skills, enhancing behavioral adaptability, and adopting flexible HR practices to cope with technological and organizational changes.

#### 5.2.2 Quality of Work Life

The results show that the mean score for quality of work life was 3.69 with a standard deviation of 0.66, indicating a relatively high level of perceived quality of work life among respondents. The dimension of managerial support achieved the highest mean score, while work-life balance ranked comparatively lower, reflecting the high work pressures characterizing the telecommunications sector.

#### 5.2.3 Entrepreneurship

The descriptive analysis revealed a high level of entrepreneurship, with an overall mean score of 3.81 and a standard deviation of 0.58. The innovation dimension recorded the highest mean (3.87), followed by proactiveness (3.79), and risk-taking (3.76), indicating a strong entrepreneurial orientation within Jordanian telecommunications companies.

### 5.3 Measurement Model Assessment

#### 5.3.1 Reliability and Convergent Validity

The measurement model was assessed to ensure reliability and convergent validity. Cronbach's

Alpha values ranged between 0.82 and 0.91, exceeding the recommended threshold of 0.70. Composite Reliability (CR) values ranged from 0.85 to 0.93, while Average Variance Extracted (AVE) values ranged between 0.56 and 0.68. These results confirm that the measurement model demonstrates adequate reliability and convergent validity.

### 5.3.2 Discriminant Validity

Discriminant validity was evaluated using the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio (HTMT). All HTMT values were below the threshold of 0.85, indicating satisfactory discriminant validity among the study constructs.

### 5.3.3 Structural Model Assessment

### 5.3.4 Multicollinearity Assessment

Prior to hypotheses testing, multicollinearity among the independent variables was examined using the Variance Inflation Factor (VIF). All VIF values were below 3.0, indicating the absence of multicollinearity issues that could bias the estimation of path coefficients.

### 5.4 Hypotheses Testing

The hypotheses were tested using path analysis within the PLS-SEM framework based on bootstrapping procedures. The results are summarized as follows:

**H01:** Human resource flexibility has no statistically significant effect on quality of work life. The results indicated a positive and statistically significant effect ( $\beta = 0.53$ ,  $T = 8.94$ ,  $p < 0.001$ ). Accordingly, the null hypothesis was rejected.

**H02:** Human resource flexibility has no statistically significant effect on entrepreneurship. The results revealed a positive and statistically significant effect ( $\beta = 0.39$ ,  $T = 6.12$ ,  $p < 0.001$ ). Therefore, the null hypothesis was rejected.

**H03:** Quality of work life has no statistically significant effect on entrepreneurship. The findings demonstrated a positive and statistically significant effect ( $\beta = 0.41$ ,  $T = 7.03$ ,  $p < 0.001$ ). Thus, the null hypothesis was rejected.

**H04:** Human resource flexibility has no indirect effect on entrepreneurship through quality of work life. The mediation analysis showed that the indirect effect was statistically significant ( $\beta = 0.22$ ,  $T = 5.48$ ,  $p < 0.001$ ). The direct effect decreased from 0.39 to 0.27 after including the mediator, indicating partial mediation. Consequently, the null hypothesis was rejected.

### Summary of Hypotheses Testing Results

The results confirm the existence of statistically significant positive relationships among the study variables. Human resource flexibility directly influences both quality of work life and entrepreneurship. Quality of work life also directly affects entrepreneurship and partially mediates the relationship between human resource flexibility and entrepreneurship.

### 5.5 Summary

This chapter presented the statistical analysis and hypotheses testing results using PLS-SEM. The findings support the proposed conceptual framework and provide empirical evidence of the strategic role of human resource flexibility and quality of work life in enhancing entrepreneurship within Jordanian telecommunications companies. These results form the basis for the discussion and recommendations presented in the following chapter.

## 6. RESULTS, CONCLUSIONS, AND RECOMMENDATIONS

### 6.1 Results

Based on the statistical analysis and hypotheses testing conducted in the previous chapter, the present study arrived at several key findings that clarify the nature of the relationships among the study variables.

First, the results indicate that the level of human resource flexibility in Jordanian telecommunications companies is relatively high. This suggests that these companies place considerable emphasis on developing employee skills, enhancing behavioral adaptability, and adopting flexible human resource practices consistent with the dynamic nature of the telecommunications sector.

Second, the findings demonstrate a statistically significant positive effect of human resource flexibility on quality of work life. This result indicates that flexible human resource policies contribute to improving the work environment, enhancing job satisfaction, and achieving better balance between work and personal life.

Third, the study reveals a statistically significant positive effect of human resource flexibility on entrepreneurship. This confirms that organizational flexibility plays a critical role in promoting innovation, proactiveness, and calculated risk-taking within Jordanian telecommunications companies.

Fourth, the results confirm that quality of work life has a statistically significant positive effect on entrepreneurship. This highlights the importance of

providing a supportive and motivating work environment that encourages entrepreneurial behavior among employees.

Finally, mediation analysis demonstrates that quality of work life partially mediates the relationship between human resource flexibility and entrepreneurship. Human resource flexibility enhances entrepreneurship both directly and indirectly through improving quality of work life.

## 6.2 Conclusions

In light of the study findings, several conclusions can be drawn. Human resource flexibility represents a strategic approach rather than merely an operational tool for managing the workforce. Flexible human resource practices enable organizations to respond effectively to environmental changes and foster entrepreneurial behavior.

The study further concludes that quality of work life serves as a critical explanatory mechanism linking human resource flexibility to entrepreneurial outcomes. Organizations seeking to enhance entrepreneurship must therefore focus not only on flexibility but also on creating a supportive and fair work environment that addresses employees' professional and psychological needs.

Overall, the results support contemporary theoretical perspectives that view human resources as a dynamic strategic asset capable of generating sustainable competitive advantage when managed flexibly and supported by high quality work life conditions.

## 6.3 Recommendations

Based on the study findings and conclusions, the following recommendations are proposed:

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- Jordanian telecommunications companies should strengthen human resource flexibility by expanding multi-skilling training programs and encouraging job rotation to enhance employee adaptability.

- Organizations should prioritize improving quality of work life by fostering supportive leadership, enhancing organizational justice, and promoting work-life balance.

- Human resource policies should be designed to encourage innovation, initiative, and calculated risk-taking across all managerial levels.

- Employees should be actively involved in decision-making processes and granted greater autonomy to enhance their sense of responsibility and entrepreneurial engagement.

- Human resource departments should align HR practices more closely with organizational strategic objectives, particularly those related to entrepreneurship and innovation.

## Suggestions for Future Research

In light of the study limitations, future research may consider examining the proposed model in different economic sectors, such as banking or manufacturing, to enhance the generalizability of the findings.

Future studies may also explore additional mediating or moderating variables, such as organizational culture or leadership styles, that could influence the relationship between human resource flexibility and entrepreneurship.

Longitudinal research designs are recommended to examine changes in study variables over time, rather than relying solely on cross-sectional data. In addition, qualitative or mixed-method approaches could provide deeper insights into employees' perceptions of flexibility and quality of work life.

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