# Strategic Human Resource Management in Financial Crises: A Case Study of Al-Hikma Pharmaceuticals in Jordan

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**Abstract.** This study investigates the strategic role of human resource management (HRM) in responding to financial crises, focusing on Al-Hikma Pharmaceuticals in Jordan. Using a mixed-methods approach, we surveyed 110 employees and conducted regression and correlation analyses. Our findings reveal that while human resource capacity is positively related to strategic responses to external uncertainties, Al-Hikma Pharmaceuticals' strategic responses did not significantly mitigate the effects of financial crises. The study contributes to the literature by highlighting the complex relationship between HRM practices and organizational resilience in the pharmaceutical industry during financial turmoil. These findings have important implications for HR professionals and organizational leaders in developing strategic HRM practices to enhance crisis preparedness and response.

**Keywords:** Al-Hikma Pharmaceuticals, Human Resources, Human Resource Management, Financial Crisis, Organization and Strategic Response.

### 1. Introduction

The concept of Human Resources as a distinct management function emerged in the early 20<sup>th</sup> century, significantly influenced by the human relations movement. The success of any endeavor is significantly reliant on the proficiency and talents of its employees, as they form the fundamental cornerstone for achieving a competitive edge. This underscores the role of Human Resources Management (HRM) in contemporary organizations, emphasizing the efficient utilization of the human component in various establishments. Modern businesses and institutions recognize human resources management as a crucial organizational unit. Its significance is heightened during crises, serving as a vital aspect of crisis management (Hayes, 2020). Contingency theory states that organizations need to strengthen environmental adaptability in times of crisis (Zhou and Liu, 2013). Adapting to the environment includes management models of the organization apart from external social, cultural, and economic environments. Considering the new era of technological development, organizations face challenges from external factors such as disruptions arising from uncertainties in economies and internal management governance (Franco, 2021).

Human Resource Management, a top-tier strategy seeks to achieve a competitive advantage by formulating a core strategy for a dedicated and skilled workforce. It employs an array of interpersonal and organizational methods and, individuals (Lloyd and Leslie, 2004). Human Resources Management is structured to organize and oversee the activities related to an organization's human assets (Storey, 2007). Recent research indicates that companies prioritizing employee well-being during crises fare better than those solely focused on system security, operations, infrastructure, and traditional public relations (Bundy J. et al., 2017). HR must equip employees with essential information about potential business threats and clarify their responsibilities during crises. Human resources bring the necessary expertise to ensure employees can effectively participate in crisis management, enhancing the organization's resilience and longevity (Athamneh, S. 2018).

During the crisis, internal management has a significant role as it provides resources such as management expertise, human resources, and strategies that can aid in better organizational performance (Severo et al., 2020). However, there is limited research on how organizations deal with risks and uncertainties during a crisis (Yi et al., 2021). Thus, a study of this kind would highlight the importance of human resource management during a crisis.

Al-Hikma Pharmaceuticals, a Jordan-based company, has strategically managed its human resources during financial crises by focusing on resilience and adaptability. In facing economic downturns, the company has emphasized the importance of maintaining a skilled and motivated workforce, understanding that human capital is critical in navigating challenging times (Abed and Altaee, 2020). They have achieved this by implementing robust training programs, ensuring continuous skill development, and fostering a culture of innovation and flexibility among employees. Top-level management has the power to influence the organization's capacity to mitigate the impact of this crisis. It is essential for the highest governing body not to obstruct, ignore, or continuously tolerate the crisis management actions of lower-level managers (Zacher and Rudolph, 2022). Al-Hikma has historically faced several financial challenges caused due to economic crisis, fluctuations in currency markets, regulatory changes, regional imbalance, refugee crisis and shifts in healthcare demand. This has necessitated adaptive HRM strategies to maintain operational continuity for the company and remain resilient in the face of financial adversity. The company's experience in managing the workforce makes it unique to explore how HRM can support both organizational sustainability and employee well-being. There is limited research on how pharmaceutical companies in developing economies like Jordan strategically utilize HRM during financial crises. The study aims to address this gap by investigating Al-Hikma, a leading Jordanian pharmaceutical company with global operations.

Despite significant research on financial crises and their economic impacts, other gaps exist between financial downturns and human resource management practices. The long-term implications of strategic

decisions like cost-cutting, layoffs and downsizing on organizational sustainability and human capital have not been studied. Additionally, the lack of research on alternative HRM strategies, such as retraining, redeployment and employee engagement during crises, highlights the need for a comprehensive study of investigating the critical role of HRM in navigating financial crises and fostering organizational resilience in times of economic instability. Hence, the study aims to assess the role of human resources in effectively responding to the financial crisis in Al-Hikma Pharmaceuticals PLC, Jordan. The study was conducted with the following objectives:

- To analyze the role of human resources in responding strategically to external uncertainties during a financial crisis.
- To determine the strategies used by Al-Hikma Pharmaceuticals in tackling a financial crisis.

The study makes a significant contribution to the existing body of knowledge on HRM in financial crises by providing an in-depth analysis in the context of understudied industry, pharmaceuticals in Jordan. The study highlights a new perspective and adds to the global discourse on HRM in financial crises, suggesting that effective strategic HRM helps adapt to external pressures to support long-term strategic goals.

# 2. Literature Review and Hypothesis Development

### 2.1 Theoretical Framework

### Resource Based-View (RBV) theory

The Resource Based-View (RBV) theory is a foundation for understanding how HRM practices impact organizational resilience. The RBV states that if a firm can quadruple up resources which are Valuable, Rare, Inimitable and Non-Substitutable (VRIN), then those companies will be able to escalate competitive advantages. At the global level, human capital (the skills and knowledge of employees) is a key resource in this model. These Human Resources can provide an organization with a sustainable competitive advantage and effective HRM practices are used to maintain or enhance this value (Gerhart & Feng, 2021). In financial crises, the importance of human capital is increased because employees who can innovate, adapt and remain productive amidst this pressure are central to organizational survival. HRM practices, i.e., training and development, performance management, and employee engagement, play a very important role in creating this kind of resilience. Investing in these areas can guarantee that when it comes to financial insecurity, organizations also will get a talented workforce that knows how to manage crisis situations (Delery & Roumpi, 2017).

### **Contingency Theory**

Contingency theory holds that there is no universal way of managing an organization. Instead, the ways in which companies are managed should depend on certain specifics surrounding each situation and/or event. The economic environment faced by organizations in financial crises is Volatile, Uncertain and Complex with Uncertainty (VUCA). Thus, HRM practices have to be flexible and temporary in times of such conditions, during a crisis, traditional HRM practices may need to be altered, focusing more on short-term survival as opposed to long-term advancement (Shala, et al., 2021). HRM practices such as flexible work arrangements, crisis communication strategies and rapid re-skilling initiatives reflect the adaptability of HRM to support organizational resilience in the face of a financial downturn. Contingency theory thus did lend credence to the notion that HRM practices should be dynamic and crisis-specific during financial turmoil rather than offering one universal practice for an organization susceptible when it becomes crucial during disruption (Opara & Waheduzzaman, 2024).

### **Systems Theory**

This theory posits that an organization is a complex system with interdependent parts that include people, processes, and technology. HRM is thought of as a vertically integrated subsystem, one that sets at the core of an organization and interacts with other organizational systems (Product/service design and development system; Production System, etc.) to maintain all these in balance (Mayrhofer, 2004). This interdependence becomes much more apparent during a financial crisis when HRM pertains to the key role of preserving organizational coherence and coordination. In the face of a crisis, HRM practices such as leadership development, team building, cross-functional communication and alignment with organizational culture are critical to bringing various parts of the organization to work together successfully (Yawson, 2013). Collaboration between HRM and organizational strategy may contribute towards enhancing organizational resilience during financial crises by aligning their practices with broader strategic responses to challenges.

### 2.2 Human Resource Management

Crisis events continue to challenge large institutions. Despite the past decade seeing events like terrorist attacks, natural calamities, and ethical breaches, fewer than 60% of employees believe their organizations are adequately prepared for crises (Fegley & Victor, 2005). This sentiment is echoed by many top executives (Moynihan, 2008). Often, businesses overlook the strategic importance of crisis management, leaving them ill-prepared when disasters strike (Sheaffer & Mano-Negrin, 2003). A study by Miller (2002) revealed that only 47% of the 137 significant organizations assessed had a crisis strategy. Similarly, a Human Resources Management Association survey found that 40% of HR professionals reported that their companies had no crisis or disaster plans (Cohen, 2002). The lack of crisis preparation can be attributed to various reasons, from limited resources to the misguided belief that some organizations are immune to such events (Pearson & Mitroff, 1993). However, as companies grow more technologically advanced and operate in increasingly volatile global environments, integrating crisis management into their core strategies becomes essential to protect valuable assets (Boin & McConnell, 2007; Elliott, 2006).

Enhancing crisis management skills requires tailored corporate education, performance measures, and strategies that empower stakeholders to identify, address, and rebound from crises (Hutchins & Wang, 2008). Effective crisis management planning demands a harmonious blend of human resource development, organizational architecture, culture, and strategy (Howell, 2004; Preble, 1997).

Strategic Human Resource Development (SHRD) can bolster an organization's operational prowess and capacity to glean insights from crises, amplifying its resilience and assurance in navigating unforeseen challenges (Roberts & Lajtha, 2002). In today's modern era, every organization, irrespective of its size, should strategically utilize an optimum number of human resources to address potential crises and devise future strategies to mitigate their effects (Sayegh et al., (2004). To enhance efficiency and success, a company can leverage its human resources function to develop business-focused solutions (Al Shobaki et al., 2016).

The Human Resources Department focuses on the human aspect of management. Since every organization consists of individuals, it is essential to utilize their skills, enhance their abilities, and motivate them to perform at their best while ensuring their loyalty to the institution. Achieving organizational goals hinges on this, irrespective of the organization's nature, be it in government, business, education, healthcare, or social services (Decenzo & Robbins, 2016).

Efficient human resource management is pivotal in updating, educating, and nurturing its workforce, ensuring it can handle contemporary challenges. This enhances the quality of their work, providing the organization with a competitive advantage in the marketplace. Human resources management bridges the gap between the administration and its staff, resolving conflicts among employees and between the

staff and management (Edvardsson & Durst, 2021). Additionally, it is instrumental in navigating both present and anticipated organizational crises. Thus, the present study proposes the following hypothesis:

 $H_{01}$ : Al-Hikma Pharmaceuticals' human resource capacity is not positively related to the level of strategic responses to external uncertainties.

 $H_1$ : Al-Hikma Pharmaceuticals' human resource capacity is positively related to the level of strategic responses to external uncertainties.

### 2.3 Role of Human Resources Management in Combating Financial Crisis

Strategic HRM focuses aligns with human resource policies during financial crises with the overall business strategy, ensuring that organizations adapt, survive and thrive in the face of economic challenges (Roche, et al., 2011). During financial crises, organizations face immense pressure to maintain operational efficiency while managing costs. In such scenarios, strategic HRM plays a critical role in ensuring that the workforce remains motivated, engaged and productive, even when resources are constrained (Boufounou & Avdi, 2016). By fostering a culture of continuous learning and adaptability, HRM ensures that employees are equipped with the necessary skills to navigate through uncertain times. Strategic HRM is crucial in maintaining employee morale. Through transparent communication, fair restructuring process and support systems, HRM helps mitigate the negative impacts of a financial crisis on the workforce (Hoke, et al. 2020).

Organizations today rely more on their workforce, or knowledge workers, to gain a competitive edge and generate profits rather than solely on equipment, technology, or systems. However, regardless of their stature or success, these organizations become highly vulnerable when employees err (Lockwood, 2005). The challenge and solution both lie within the people. HR leaders must strategically ensure their organization recognizes these human vulnerabilities in potential crises. They must also ensure that their crisis management strategy encompasses all potential risks (Wang et al., 2009). To be recognized as a pivotal partner in crisis management, alongside roles such as risk management and business continuity, HR professionals need to be fluent in the nuances of crisis management. They should ensure that human capital is integrated into all crisis management and business continuity plans (Hutchins et al., 2008). Through offerings like crisis communication plans, resource allocation during crises, safety training, and succession planning, human resources can safeguard and even enhance an organization's intrinsic value, offering reassurance and preparedness to the workforce (Vouzas and Nizamidou, 2018).

Crisis management planning enhances an organization's ability to handle emergencies and ensures a swift recovery when faced with a crisis. Creating a crisis management plan is vital as it offers guidelines on prevention, handling, and recovery from crises (Athamneh, S., 2018). Combating crises should be consistent with sustainable long-term strategies (OECD, 2008). Organizations that prioritize their human capital consistently exhibit signs of success by actively investing in HR functions. This includes their ability to attract and retain talent, foster a work environment encouraging creativity and innovation, and direct all human potential toward clear organizational goals and strategies (Pearson & Clair, 2007).

During financial crises, Al-Hikma has also focused on cost-effective human resource strategies. This includes streamlining processes and finding innovative ways to reduce operational costs without compromising employee satisfaction or service quality (Al-Taee and Al-Khafaji, 2016). They have been known to leverage technology to enhance efficiency and productivity, which helps reduce costs and prepares the workforce for a rapidly evolving pharmaceutical industry. Furthermore, they prioritize clear communication and transparency with their employees regarding the company's financial status and any necessary measures, which helps maintain trust and morale during difficult times.

Moreover, Al-Hikma Pharmaceuticals strongly emphasizes employee well-being and mental health, especially during financial crises when stress levels can be high (Al-Hikma Pharmaceuticals PLC, 2023). They provide support programs, counseling services, and flexible work arrangements to ensure

employees feel supported. By investing in the well-being of its employees, Al-Hikma not only enhances productivity but also fosters loyalty and a sense of community, which are invaluable in navigating financial challenges and emerging stronger. Thus, the present study proposes the following hypothesis:

 $H_{02}$ : Al-Hikma Pharmaceuticals does not respond strategically to decrease the effect of external uncertainties caused by the financial crisis.

 $H_2$ : Al-Hikma Pharmaceuticals responds strategically to decrease the effect of external uncertainties caused by the financial crisis.

#### 3. Materials and Methods

Sources of Data: Based on the requirements of the research objectives, the study adopted a quantitative method of research, and the data was collected through primary sources. A survey was considered to be most appropriate due to its ability to collect quantitative data in a short period and systematically gather standardized data. The study population was comprised of 2,200 employees working at Al-Hikma Pharmaceuticals PLC, Jordan, in 2022. Hence, 5% of the population was considered as a sample of the study (110 respondents) based on study by Morse (2000). A well-structured questionnaire based on a Likert five-point scale was adopted from Boufounou and Avdi (2016) and Lesi Hertati et al. (2020), considering the strategic response, human resource capacity, firm performance, and financial crisis. The questionnaires were administered offline and online. 125 questionnaires were distributed between June 2023 and August 2023, out of which 110 effective questionnaires were received, acquiring an 88% effective rate. The role of human resources is measured using strategic response to the financial crisis and the role of human resources in financial crisis.

# 3.1 Sampling

Convenience sampling is adopted to select the sample respondents of the survey (Jawad Golzar, et al., 2022). Various researches were studied assessing the strategic response during financial crisis (Sultan Alshehri, et al., 2023; Kheirandish, et al., 2015). Hence, sample respondents from Al-Hikma Pharmaceuticals PLC, Jordan, were selected based on parameters for assessing human resource management during the financial crisis. Al-Hikma Pharmaceuticals PLC is a multinational pharmaceutical company headquartered in London, UK, but its origins are deeply rooted in Jordan. It specializes in manufacturing and trading various branded and non-branded generic and in-licensed pharmaceutical products. Al-Hikma's portfolio includes a diverse range of medications in various therapeutic areas, including cardiovascular, oncology, diabetes, and infectious diseases (Al-Hikma Pharmaceuticals PLC, 2023). Hence, 110 employees (Managers and executives) who could give insight into the response mechanism and mitigation in the organization during a financial crisis were selected for the study. Strategic Response and Human Resource Capacity were chosen as the independent variables. External Uncertainty caused by the Financial Crisis was the dependent variable in the survey (Sarstedt and Mooi, 2014).

### 3.2 Tools and techniques used for the study

The study considers both descriptive and inferential statistics. Descriptive statistics included frequency comprising all items of each construct framed in the assertive statements, and the options were quantified on a 5-point likert scale; percentage showed the number or ratio of agreement or non-agreement of the statements expressed as a fraction of 100, mean which indicates the perception towards agreement or non-agreement of the respondents, and standard deviation which measured difference in the group of data in the study which measures the variation from the mean. Multiple regression and Pearson Correlation tests were used to analyze the association between the variables of the role of human resources management in financial crises caused by external uncertainties. Regression can help

determine the extent to which independent variables predict a dependent variable. Pearson correlation measures the strength and direction of the linear relationship between two continuous variables, providing insights into how closely related the variables are.

#### 4. Results

Human resources are crucial to an organization's success and one of its most valuable assets. Properly managing these resources helps the company achieve its goals. Without human resources, managing the company's tangible assets becomes impossible. Without human resources, the company is merely a collection of assets without the capability to produce effectively (Topper et al., 2013). The financial crisis could lead to a situation where potential high-impact events threaten the organization's existence with probable operational shutdown, as perceived by its stakeholders (Opara & Waheduzzaman, 2024). As human resources are vital to witnessing a financial crisis caused by external uncertainties in the organization, this section analyzes the role of human resources in responding strategically to external uncertainties during a financial crisis.

### 4.1 Analysis of Strategic Response to the Financial Crisis in Al-Hikma Pharmaceuticals

Table 1: Strategic Response to the Financial Crisis in Al-Hikma Pharmaceuticals

Statements		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
Cost-cutting/reduction	F	9	11	34	39	17	3.40	1 12
measures	%	8.2	10.0	30.9	35.5	15.5	3.40	1.12
Re-evaluating and	F	12	14	27	35	22		
restructuring the business plan	%	10.9	12.7	24.5	31.8	20.0	3.37	1.25
Strategic Planning and	F	18	14	21	33	24	2.20	1.20
Management	%	16.4	12.7	19.1	30.0	21.8	3.28	1.38
Preparing and adjusting	F	10	20	25	30	25	2.26	1.07
financial budgets	%	9.1	18.2	22.7	27.3	22.7	3.36	1.27
Strategic partnership	F	11	16	17	40	26		
through mergers and acquisitions	%	10.0	14.5	15.5	36.4	23.6	3.49	1.28
Effective Marketing	F	9	13	19	38	31	3.63	1.24
	%	8.2	11.8	17.3	34.5	28.2	3.03	1.24
Risk Management	F	7	11	18	44	30	3.72	1.16
	%	6.4	10.0	16.4	40.0	27.3	3.72	1.10
Increasing Reserves	F	11	15	17	36	31	3.55	1.30
-	%	10.0	13.6	15.5	32.7	28.2	3.33	1.50
Cutting	F	17	10	24	36	23	3.35	1.33
employees/salaries	%	15.5	9.1	21.8	32.7	20.9	3.33	1.33
Increasing investment	F	12	19	22	42	15	2 26	1.22
	%	10.9	17.3	20.0	38.2	13.6	3.26	1.22
Improving regulation	F	10	12	24	41	23		
and strengthening corporate governance	%	9.1	10.9	21.8	37.3	20.9	3.50	1.20
Promoting transparency	F	11	13	19	41	26	3.53	1.25
and integrity	%	10.0	11.8	17.3	37.3	23.6	3.33	1.23

Source: Primary Source, Compiled by the Researcher

The table 1 shows the respondents' opinions concerning the strategic response to the financial crisis in Al-Hikma Pharmaceuticals. A significant majority of respondents (50.9%, n=56) agreed that cost-

cutting/reduction measures were a strategic response to the financial crisis. Respondents (51.8%, n=57) also agreed that re-evaluating and restructuring the business plan was a strategic response to the financial crisis. Most respondents (51.8%, n=57) agreed that strategic Planning and Management could tackle financial crisis. A substantial portion of respondents (50%, n=55) agreed that preparing and adjusting financial budgets was a strategic response to the financial crisis. A significant number of respondents (60%, n=66) agreed that strategic partnership through mergers and acquisitions was a strategic response to the financial crisis. Most of the respondents (62.7%, n=69) agreed that effective marketing was a strategic response to the financial crisis. Larger number of respondents (67.2%, n=74) agreed that risk management was a strategic response to the financial crisis. Majority of respondents (60.9%, n=67) agreed that increasing reserves was a strategic response to the financial crisis. Significant number of respondents (53.6%, n=59) agreed that cutting employees/salaries was a strategic response to the financial crisis. Majority of respondents (51.8%, n=57) agreed that increasing investment was a strategic response to the financial crisis. A substantial portion of respondents (58.2%, n=64) agreed that improving regulation and strengthening corporate governance was a strategic response to the financial crisis. Majority of respondents (60.9%, n=67) agreed that promoting transparency and integrity was a strategic response to the financial crisis. As a strategic response, the company reduced operational costs without compromising product quality during the crisis. This involved optimizing manufacturing processes, reducing overhead costs, and improving supply chain efficiency (Al-Haddad and Al-Sufy, 2021). Restructuring debt, negotiating better terms with lenders, or exploring new financing options during the crisis improved the company's financial health (Mitroff, 2019). Despite financial constraints, maintaining or even increasing investment in research and development was a strategic move that Al-Hikma made.

The mean and standard deviation of cost-cutting/reduction measures were 3.40 and 1.12, respectively; re-evaluating and restructuring the business plan were 3.37 and 1.25, respectively; Strategic Planning and Management were 3.28 and 1.38, respectively; preparing and adjusting financial budgets were 3.36 and 1.27, respectively; strategic partnership through mergers and acquisitions were 3.49 and 1.28, respectively; effective marketing were 3.63 and 1.24, respectively; Risk management were 3.72 and 1.16, respectively; increasing reserves were 3.55 and 1.30, respectively; cutting employees/salaries were 3.35 and 1.33, respectively; increasing investment were 3.26 and 1.22, respectively; improving regulation and strengthening corporate governance were 3.50 and 1.20, respectively; promoting transparency and integrity were 3.53 and 1.25, respectively. It was found that long-term sustainability and ethical practices attracted investors and improved the brand image, which could have positive financial implications during the crisis (Shayb and Musetescu, 2020). Staying ahead of regulatory changes and adapting quickly to market shifts (such as changes in healthcare policies, drug pricing regulations, etc.) helped Al-Hikma mitigate risks and exploit new opportunities (Khaleel and Awadallah, 2020).

# 4.2 Analysis of Role of Human Resources in a Financial Crisis

Statements		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean
Human resources	F	10	14	15	50	21	
decreased during the financial crisis	%	9.1	12.7	13.6	45.5	19.1	3.527
	, ,	7.12	12.,,	10.0		17.1	

Table 2: Role of Human Resources in a Financial Crisis

SD

Many employees	F	11	18	20	40	21		
requested to resign during the financial crisis.	%	10.0	16.4	18.2	36.4	19.1	3.382	1.249
There were many	F	12	17	21	38	22		
work conflicts among employees during the financial crisis.	%	10.9	15.5	19.1	34.5	20.0	3.373	1.270
The senior managers	F	13	20	23	29	25		
changed the legislation of the fiscal domain to tackle the financial crisis.	%	11.8	18.2	20.9	26.4	22.7	3.300	1.324
The employees	F	10	14	17	45	24		
borrowed loans from banks to run the organization during the financial crisis.	%	9.1	12.7	15.5	40.9	21.8	3.536	1.224
The employees	F	18	19	15	31	27		
devised and implemented effective strategies to tackle the financial crisis.	%	16.4	17.3	13.6	28.2	24.5	3.273	1.427
The employees	F	15	22	21	28	24		
benefited from the training they received to tackle the financial crisis.	%	13.6	20.0	19.1	25.5	21.8	3.218	1.357
The organization	F	13	17	25	33	22		
played a vital role in managing human resources efficiently during the crisis	%	11.8	15.5	22.7	30.0	20.0	3.309	1.283

Source: Primary Source, Compiled by the Researcher

The table 2 shows respondents' opinions concerning the role of human resources in tackling the financial crisis. During the financial crisis, the majority of the respondents (64.5%, n=71) agreed that human resources decreased. Most of the respondents (48.2%, n=53) opined that the employees worked as a team to tackle the crisis. Many respondents (55.5%, n=61) stated that many employees requested to resign, and the majority of the respondents (54.5%, n=60) agreed that there were many work conflicts among employees during the financial crisis. A significant number of respondents (49.1%, n=54) highlighted that the senior managers changed the legislation of the fiscal domain, and a larger number of respondents (62.7%, n=69) mentioned that the employees borrowed loans from banks to run the organization. A substantial portion of respondents (52.7%, n=58) were found to devise and implement effective strategies, whereas a considerable share of respondents (47.3%, n=52) agreed that the employees benefited from their training to tackle the financial crisis. A large number of respondents (50%, n=55) agreed that the organization was vital in managing human resources efficiently during the crisis. During financial crises, Al-Hikma kept the workforce motivated and reduced turnover, crucial

for maintaining productivity and innovation. Also, implementing digital technologies in operations, R&D, and marketing led to cost savings and operational efficiencies (Mitroff, 2000; Debei, 2019).

The mean and standard deviation of human resources decreased during the financial crisis period was 3.527 and 1.202, respectively; employees who worked as a team to tackle the financial crisis were 3.255 and 1.337, respectively; many employees who requested to resign during the financial crisis were 3.382 and 1.249, respectively; there were many work conflicts among employees during the financial crisis were 3.373 and 1.270, respectively; senior managers who changed the legislation of the fiscal domain to tackle the financial crisis were 3.300 and 1.324, respectively; employees who borrowed loans from banks to run the organization during the financial crisis were 3.536 and 1.224, respectively; employees who devised and implemented effective strategies to tackle financial crises were 3.273 and 1.427, respectively; employees who benefited from the training to tackle the financial crisis were 3.218 and 1.357, respectively; an organization is vital in managing human resources efficiently during the crisis were 3.309 and 1.283, respectively. Al-Hikma evaluated its product portfolio to focus on high-margin products or those with significant market potential. Discontinuing underperforming products or those with low profitability was crucial during the financial crisis (Groh, 2014) and instigating a functional strategic management could be key (Weiner, 2006).

## 4.3 Analysis of External Uncertainties Caused During Financial Crisis

Table 3: External Uncertainties Caused During Financial Crisis

Statements		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	SD
The financial crisis leads to	F	52	32	14	8	4		
decreased market volatility and makes it easy for the organization to predict future market trends	%	47.3	29.1	12.7	7.3	3.6	1.909	1.105
Access to credit becomes	F	49	27	18	10	6		
less constrained during a financial crisis, affecting the organization's ability to secure necessary funding	%	44.5	24.5	16.4	9.1	5.5	2.064	1.214
The organization's sales	F	50	38	6	10	6		
and revenue are less impacted during the crisis	%	45.5	34.5	5.5	9.1	5.5	1.945	1.172
There are high compliance	F	8	21	8	26	47		
costs and operational complexities when the Government responds to a crisis with new policies	%	7.3	19.1	7.3	23.6	42.7	3.755	1.369
There are significant	F	5	18	19	35	33		
changes in exchange rates during the crisis	%	4.5	16.4	17.3	31.8	30.0	3.664	1.198
The global supply chain of	F	11	21	17	35	26		
the organization is disrupted, leading to challenges in sourcing materials and products	%	10.0	19.1	15.5	31.8	23.6	3.400	1.308
•	F	4	14	14	45	33	3.809	1.113

Financial crises affect investor sentiment, leading to reduced investment impacting the organization's ability to raise capital	%	3.6	12.7	12.7	40.9	30.0		
A financial crisis can	F	44	32	16	11	7		
positively change the competitive landscape, as some companies may fail, merge, or change their business strategies, affecting market dynamics	%	40.0	29.1	14.5	10.0	6.4	2.136	1.230

Source: Primary Source, Compiled by the Researcher

The table 3 shows the respondents' opinions concerning the external uncertainties caused during the financial crisis in Al-Hikma Pharmaceuticals. A notable proportion of respondents (76.4%, n=84) disagreed that financial crisis leads to decreased market volatility and makes it easy for the organization to predict future market trends. A significant number of respondents (69.1%, n=76) disagreed that access to credit becomes less constrained during a financial crisis, affecting the organization's ability to secure the necessary funding. Most of the respondents (80%, n=88) disagreed that the organization's sales and revenue were less impacted during the crisis. A large number of respondents (66.4%, n=73) agreed that there are high compliance costs and operational complexities when the Government responds to a crisis with new policies. A notable proportion of respondents (61.8%, n=68) agreed that there were significant changes in exchange rates during the crisis. A meaningful percentage of respondents (55.5%, n=61) agreed that the global supply chain of the organization is disrupted, leading to challenges in sourcing materials and products. A substantial portion of respondents (70.9%, n=78) agreed that financial crises affect investor sentiment, reducing investment and impacting the organization's ability to raise capital. A considerable share of respondents (69.1%, n=76) disagreed that a financial crisis can positively change the competitive landscape, as some companies may fail, merge, or change their business strategies, affecting market dynamics. It was found that central banks may alter interest rates in response to a financial crisis, affecting the cost of borrowing and investment returns for Al-Hikma Pharmaceuticals. Financial crises had global repercussions, affecting economic growth and trade patterns (Abdullah and Al-Bashir, 2018; Kozachenko, et al., 2022), which impacted the operations of the organization in Jordan.

The mean and standard deviation of the statement financial crisis leads to decreased market volatility and makes it easy for the organization to predict future market trends were 1.909 and 1.105, respectively; access to credit becomes less constrained during a financial crisis, affecting the organization's ability to secure necessary funding were 2.064 and 1.214, respectively; organization's sale and revenue is less impacted during the crisis were 1.945 and 1.172, respectively; there are high compliance costs and operational complexities when Government responds to crisis with new policies were 3.755 and 1.369, respectively; there are significant changes in exchange rates during the crisis were 3.664 and 1.198, respectively; global supply chain of the organization is disrupted leading to challenges in sourcing materials and products were 3.40 and 1.308, respectively; financial crises affect investor sentiment, leading to reduced investment, impacting the organization's ability to raise capital were 3.809 and 1.113, respectively; financial crisis can positively change the competitive landscape, as some companies may fail, merge, or change their business strategies, affecting market dynamics were 2.136 and 1.230, respectively. It implied that the financial crisis led to a loss of investor confidence, making it harder for organizations to raise capital through equity or debt. This limited the growth opportunities and increased

the cost of capital (Shayb and Musetescu, 2020). Also, financial crises disrupted global supply chains. This led to increased costs or delays for organizations that rely on international suppliers, affecting their ability to produce and sell products (Flammer and Ioannou, 2020).

### 4.4 Testing of Hypotheses

### **Testing of Hypothesis 1:**

 $H_{01}$ : Al-Hikma Pharmaceuticals' human resource capacity is not positively related to the level of strategic responses to external uncertainties.

H<sub>1</sub>: Al-Hikma Pharmaceuticals' human resource capacity is positively related to the level of strategic responses to external uncertainties.

The human resource capacity with respect to the level of strategic responses to external uncertainties was tested using regression and correlation tests.

### **Results of Regression**

Table 4: Results of Regression

Variable	Coefficient	Standard Error	t-value	Sig.		
Constant	2.178	0.310	7.023	0.000		
Human Resource Capacity 2.197 0.092 2.145 0.034						
No. of Observations = 110; $R = 0.202$ ; $R^2 = 0.041$ ; $F$ value = 4.601						

Dependent Variable: External Uncertainties caused by the Financial Crisis

Source: Computed by the Researcher

The above table 4 shows the regression results concerning human resource capacity in aiding strategic responses to external uncertainties. The value of R square is 0.041, indicating the variation in human resource capacity in aiding strategic responses to external uncertainties to the extent of 4.1%. The regression coefficient of the external uncertainties is 0.197, indicating a weak and positive effect of human resource capacity in aiding strategic responses to the external uncertainties. While statistically significant (p < 0.05), the small effect size suggests that other factors not included in this model may play a substantial role in determining strategic responses. Al-Hikma might consider other factors in addition to human resource capacity when developing strategies to cope with external challenges. The null hypothesis is rejected, and the alternative hypothesis is accepted. **Hence, the human resource capacity of Al-Hikma Pharmaceuticals is positively related to the level of strategic responses to external uncertainties.** 

## **Results of Pearson Correlation**

Table 5: Results of Pearson Correlation

		Human	External
		Resource	Uncertainties
		Capacity	
Human Resource Capacity	Pearson Correlation	1	0.202
	Sig. (2-tailed)		0.034
	N	110	110

External Uncertainties	Pearson Correlation	0.202	1
	Sig. (2-tailed)	0.034	
	N	110	110

Source: Computed by the Researcher

The above table 5 shows the results of Pearson's correlation and its significance for the variable human resource capacity in aiding strategic responses to external uncertainties. The Pearson correlation was 0.202, which was statistically significant with a p-value of 0.034, lesser than 0.005, showing that the human resource capacity of Al-Hikma Pharmaceuticals is positively related to the level of strategic responses to external uncertainties.

### **Testing of Hypothesis 2:**

 $H_{02}$ : Al-Hikma Pharmaceuticals does not respond strategically to decrease the effect of external uncertainties caused by the financial crisis.

H<sub>2</sub>: Al-Hikma Pharmaceuticals responds strategically to decrease the effect of external uncertainties caused by the financial crisis.

This strategic response to decrease the effect of external uncertainties caused by the financial crisis was tested using regression and correlation tests.

### **Results of Regression**

Table 6: Results of Regression

Variable	Coefficients	Standard Error	t-value	Sig.		
Constant	2.724	0.341	7.980	0.000		
Strategic Response 0.033 0.098 0.334 0.739						
No. of Observations = 110; $R = 0.032$ ; $R^2 = 0.001$ ; $F$ value = 0.111						

Dependent Variable: External Uncertainties Caused by the Financial Crisis

Source: Computed by the Researcher

The above table 6 shows the regression results concerning strategically responding to decrease the effect of external uncertainties caused by the financial crisis. The value of R square is 0.001, indicating a variation towards the strategic response to external uncertainties caused by the financial crisis to 0.1%. The low value of the R square exhibits a weak relationship among the variables. The regression coefficient of strategic response is 0.033, indicating an insignificant effect of strategic response to external uncertainties caused by financial crisis, which is statistically insignificant as the significance value is higher than 0.05 (5%). The null hypothesis is accepted, and the alternative hypothesis is rejected. Hence, Al-Hikma Pharmaceuticals does not respond strategically to decrease the effect of external uncertainties caused by the financial crisis.

#### **Results of Pearson Correlation**

Table 7: Results of Pearson Correlation

	Strategic Response	External Uncertainties
Pearson Correlation	1	.032

Strategic	Sig. (2-tailed)		.739
Response	N	110	110
External Uncertainties	Pearson Correlation	.032	1
	Sig. (2-tailed)	.739	
	N	110	110

Source: Computed by the Researcher

The above table 7 shows the results of Pearson's correlation and its significance for the variable strategic response to the financial crisis. The Pearson correlation was 0.032, which was statistically insignificant with a p-value of 0.739, higher than 0.005, showing that **Al-Hikma Pharmaceuticals does not respond strategically to decrease the effect of external uncertainties caused by the financial crisis**.

# 5. Discussion

The research discovered that Human Resources Management (HRM) plays a pivotal role in crisis management by enhancing employee readiness and facilitating effective disaster planning. HRM bridges the management and its staff (Alagaraja et al., 2014). It has four crucial functions in crisis management. HRM consistently connects management with all employees, ensuring a suitable working atmosphere and upholding their rights within a company. This role becomes more evident during crises. HRM is instrumental in identifying organizational issues and seeking the optimal solutions (Opara & Waheduzzaman, 2024). It equips employees with the necessary knowledge and skills to manage crises, ensuring long-term stability. The research highlighted the positive influence of HRM on Al-Hikma Pharmaceuticals' strategic response during financial downturns (Saleh and Al-Rabadi, 2020). However, Al-Hikma Pharmaceuticals could not strategically decrease the effect of external uncertainties caused by the financial crisis. This discrepancy may be due to industry-specific factors in the pharmaceutical sector or the unique challenges faced by multinational companies. Though the HRM at Al-Hikma played a crucial role in managing costs during a financial crisis, which included strategies for reducing labour costs, such as implementing hiring freezes and reducing work hours, significant efforts to reduce the impact of external uncertainties were recommended through stronger financial resilience, flexible operations and risk assessment (Boyle and McDonnell, 2013; Hosie and Pforr, 2016). Also. strategic planning is involved in helping the company recover from the crisis, including workforce planning, forecasting future talent needs, and aligning HR strategies with the company's long-term goals (Al-Zu'bi, 2022). Pharmaceutical industries face longer development cycles, strict regulatory requirements and high research and development costs, which can limit the flexibility and speed with which companies can respond to sudden financial challenges. As suggested by Al-Zu'bi (2022), varying market dynamics can complicate strategic decision-making during financial crisis and HRM can play a crucial role in enhancing resilience to adapt to external financial pressures. In contrast, though Al-Hikma has strong HRM practices and is more agile in implementing strategic responses to mitigate the adverse effects of the crisis, the results of the study found a lack of robustness in effective response mechanisms. Furthermore, the study notes the necessity for HRM to transition beyond its conventional functions to contemporary HR practices, which also involve HRM's active participation in financial crisis management. This includes workforce restructuring, optimizing talent deployment and enhancing employee engagement. The study aligns with Roche, et al. (2011) about establishing cross-functional teams to streamline decision-making and invest in continuous learning to keep the workforce adaptable during adverse times. Scenario planning with risk management can align HR practices with business strategy. Data analytics can increase productivity levels and financially impact HR decisions by ensuring cost-effectiveness and transparency (Edvardsson & Durst, 2021). Moreover, as an important partner in the crisis management framework, the Human Resource Department should proactively engage employees to sustain change and ensure alignment with organizational goals. Organizations like Al-Hikma that effectively integrate HRM into crisis resolution efforts are more likely to be successful.

### 6. Conclusion

The study showed that HR is a crucial strategic player supporting businesses during adverse times in Jordan. This study provides insights into the critical role of HRM in navigating financial crises within the pharmaceutical industry. Our findings demonstrate that while strong human resource capacity can enhance an organization's ability to respond strategically to external uncertainties, the effectiveness of these responses in mitigating crisis impacts may be limited. This research contributes to the growing body of literature on strategic HRM and crisis management by highlighting the complexities of implementing HRM strategies during financial upheavals. The first limitation of the study is related to its focus on a single company named Al-Hikma in Jordan. The single company in Jordan cannot be considered representative of a large scale, thereby limiting the generalizability of its findings. The study's limitations, including its focus on a single company and reliance on self-reported data, suggest avenues for future research. Comparative studies across multiple pharmaceutical companies or industries could provide a more comprehensive understanding of HRM's role in crisis management. Additionally, longitudinal studies could offer insights into the long-term effects of HRM strategies on organizational resilience. The specific preventions of Al-Hikma as an organization, such as its organizational structure, company culture and market position, can have a particular influence on the findings, which might be different from what other organizations do. The study highlights the importance of effective HR practices to handle the immediate challenges a financial crisis brings. Strategic workforce planning, skill development, employee engagement, and effective communication are some of these processes. These protocols mitigate the adverse effects on the workforce and prepare the organization for growth and recuperation following the crisis. HR professionals in the pharmaceutical industry should focus on building employee capabilities, fostering organizational flexibility, and aligning HRM practices with overall business strategies to enhance crisis preparedness and response. Human resources must position itself strategically during a crisis by focusing on shortterm financial concerns like cost-cutting and restructuring and long-term objectives. It is suggested that Al-Hikma Pharmaceuticals must invest in its human resources to manage the unpredictability that came with the financial crisis. They would maintain higher employee morale and productivity, which would have a direct positive impact on their post-crisis recovery and performance. A more effective way of addressing the limitations is to conduct a study across multiple companies. Such an approach would allow identifying the lessons learned from the HRM strategies and practices adopted by companies from different sectors which have been particularly successful in managing crises. In conclusion, as organizations continue to face unpredictable financial challenges, the strategic integration of HRM into crisis management frameworks will be crucial for building resilient and adaptive organizations.

### References

Abed, M. & Altaee, M. (2020). The role of strategic information systems in building strategic alliances: Application to Al-Hikma Pharmaceuticals Company. *Academy of Strategic Management Journal*, 19(1), 1-11.

Al Shobaki, M. J., Abu Amuna, Y. M. & Abu-Naser, S. S. (2016). The impact of top management support for strategic planning on crisis management: A case study on UNRWA-Gaza Strip.

Alagaraja, M., Kotamraju, P. & Kim, S. (2014). A conceptual framework for examining HRD and NHRD linkages and outcomes: Review of TVET literature. *European Journal of Training and Development*, 38(4), 265-285.

Al-Haddad, S. & Al-Sufy, F. J. (2021). HR responses to financial crises in Jordanian companies. *Journal of Middle Eastern Business and Economy*, 45(2), 123-138.

Al-Hikma Pharmaceuticals PLC. (2023). Retrieved from https://www.hikma.com/jo-en

Alshehri, S., Alshammari, R., Alyamani, M., Dabbagh, R., Almalki, B., Aldosari, O., Alsowayigh, R., Alkudeer, A., Aldosari, F., Sabr, J. & Shakeel, F. (2023). Current and future prospective of pharmaceutical manufacturing in Saudi Arabia. *Saudi Pharmaceutical Journal*, *31*(4), 605-616. <a href="https://doi.org/10.1016/j.jsps.2023.03.001">https://doi.org/10.1016/j.jsps.2023.03.001</a>

Al-Taee, M. A. H. & Al-Khafaji, N. A. K. (2016). *Strategic information systems: Perspective of competitive advantage*. Dar Al-Thaqafa for Publishing and Distribution.

Al-Zu'bi, H. A. (2022). Long-term changes in HRM post-financial crisis in Jordan. *Journal of Strategic Human Resource Management*, 31(1), 15-29.

Armstrong, M. & Taylor, S. (2020). *Armstrong's handbook of human resource management practice*. Kogan Page Publishers.

Athamneh, S. (2018). HR planning for crisis management. In *Human Resource Planning for the 21st Century*. IntechOpen.

Boin, A. & McConnell, A. (2007). Preparing for critical infrastructure breakdowns: The limits of crisis management and the need for resilience. *Journal of Contingencies and Crisis Management*, 15(1), 50-59.

Boufounou, P. & Avdi, K. (2016). Financial crisis, organizational behavior and organizational silence in the public sector: A case study for Greece. *SPOUDAI - Journal of Economics and Business*, 66(1/2), 46-78.

Boyle, B. & McDonnell, A. (2013). Exploring the impact of institutional and organisational factors on the reaction of multinational companies to the global financial crisis. *Asia Pacific Business Review*, 19(1), 1-19. https://doi.org/10.1080/13602381.2013.767639

Bundy, J., Pfarrer, M. D., Short, C. E. & Coombs, W. T. (2017). Crises and crisis management: Integration, interpretation, and research development. *Journal of Management*, 43(6), 1661-1692. <a href="https://doi.org/10.1177/0149206316680030">https://doi.org/10.1177/0149206316680030</a>

Byars, L. L. & Rue, L. W. (2004). *Human resource management*. McGraw-Hill International Editions.

Cohen, J., Krishnamoorthy, G. & Wright, A. M. (2002). Corporate governance and the audit process. *Contemporary Accounting Research*, 19(4), 573-594.

Coombs, T. (2011). Crisis management and communications. Gainesville, FL: Institute for Public Relations.

de Belvis, A. G., Ferrè, F., Specchia, M. L., Valerio, L., Fattore, G. & Ricciardi, W. (2012). The financial crisis in Italy: Implications for the healthcare sector. *Health Policy*, 106(1), 10-16.

DeCenzo, D. A., Robbins, S. P. & Verhulst, S. L. (2016). Fundamentals of human resource management. John Wiley & Sons.

Delery J.E. & Roumpi D. (2017). Strategic human resource management, human capital and competitive advantage: Is the field going in circles? *Human Resource Management Journal*, 27, 1-21.

Edvardsson, I. R. & Durst, S. (2021). Human resource management in crisis situations: A systematic literature review. *Sustainability*, *13*(22), 12406. <a href="https://doi.org/10.3390/su132212406">https://doi.org/10.3390/su132212406</a>

Elliott, D. (2006). Crisis management into practice. In D. Smith & D. Elliott (Eds.), *Key readings in crisis management* (pp. 393-414). New York: Routledge.

Fegley, S. & Victor, J. (2005). Disaster preparedness: Survey report. *Society for Human Resource Management*.

Flammer, C. & Ioannou, I. (2020). Strategic management during the financial crisis: How firms adjust their strategic investments in response to credit market disruptions. *Strategic Management Journal*, 42(7), 1275-1298. https://doi.org/10.1002/smj.3265

Franco, S. (2021). The influence of the external and internal environments of multinational enterprises on the sustainability commitment of their subsidiaries: A cluster analysis. *Journal of Cleaner Production*, 297, 126654. https://doi.org/10.1016/j.jclepro.2021.126654

Gerhart, B., & Feng, J. (2021). The Resource-Based View of the Firm, Human Resources, and Human Capital: Progress and Prospects. *Journal of Management*, 47(7), 1796-1819. <a href="https://doi.org/10.1177/0149206320978799">https://doi.org/10.1177/0149206320978799</a>

Golzar, J., Noor, S. & Tajik, O. (2022). Convenience sampling. *International Journal of Education and Language Studies*, 1(2).

Groh, M. (2014). Strategic management in times of crisis. *American Journal of Economics and Business Administration*, 6(2), 49-57.

Hayes, A. S. (2020). The behavioral economics of Pierre Bourdieu. *Sociological Theory*, *38*(1), 16-35. <a href="https://doi.org/10.1177/0735275120902170">https://doi.org/10.1177/0735275120902170</a>

Hertati, L., Widiyanti, M., Desfitrina, Syafarudin, A. & Safkaur, O. (2020). The effects of economic crisis on business finance. *International Journal of Economics and Financial Issues*, 10(3), 236-244.

Hoke, E., Taraba, P. & Peterek, K. (2020). Human resources management in the corporate crisis. *Chemical Engineering Transactions*, 82, 1-6. The Italian Association of Chemical Engineering. <a href="https://doi.org/10.3303/CET2082021">https://doi.org/10.3303/CET2082021</a>

Hosie, P. & Pforr, C. (2016). Human resource development: Proactive preparation to manage crises. In *Crisis Management in the Tourism Industry* (pp. 93-108). Routledge.

Howell, B. (2004). Analysis of response operations to eradicate exotic Newcastle disease in 2002-2003: Response management. Alexandria, VA: CAN Corporation.

Hutchins, H. M. & Wang, J. (2008). Organizational crisis management: Unexplored territory in HRD research and practice. *Advances in Developing Human Resources*, 10(3), 310-330.

Hutchins, H. M., Annulis, H. & Gaudet, C. (2008). Crisis planning: Survey results from Hurricane Katrina and implications for performance improvement professionals. *Performance Improvement Quarterly*, 20(3-4), 27-51.

Khaleel, M. & Awadallah, N. (2020). Navigating crisis: The role of HR in Jordanian businesses. *Jordan Journal of Business Administration*, 18(3), 456-472.

Kheirandish, M., Rashidian, A., Kebriaeezade, A., Cheraghali, A. M. & Soleymani, F. (2015). A review of pharmaceutical policies in response to economic crises and sanctions. *Journal of Research in Pharmacy Practice*, 4(3), 115-122. https://doi.org/10.4103/2279-042X.162361

Kozachenko, E., Anand, A. & Shirokova, G. (2022). Strategic responses to crisis: A review and synthesis of promising research directions. *Review of International Business and Strategy*, 32(4), 545-580. <a href="https://doi.org/10.1108/RIBS-06-2021-0092">https://doi.org/10.1108/RIBS-06-2021-0092</a>

Lockwood, N. R. (2005). Crisis management in today's business environment. SHRM Research Quarterly, 4(2005), 1-9.

Mayrhofer, W. (2004), Social systems theory as a theoretical framework for Human Resource Management: Benediction or curse? *Management Revue*, 15(2), 178-191

Miller, M. (2002). U.S. firms lack crisis plans. Arizona Republic, D2.

Mitroff, I. (2000). Managing crises before they happen: What every executive and manager needs to know about crisis management. AMACOM Books.

Mitroff, I. (2019). Technology run amok: Crisis management in the digital age. Palgrave Macmillan.

Morse J.M. (2000) Determining Sample Size. *Qualitative Health Research*. 2000;10(1):3-5. doi:10.1177/104973200129118183

Moynihan, D. P. (2008). *The dynamics of performance management: Constructing information and reform.* Georgetown University Press.

OECD. (2008). Dealing with the financial crisis and thinking about exit strategy. *Financial Market Trends*, 2008(1).

Opara, S., & Waheduzzaman, W. (2024). The universal, contingency or configurational HRM approaches for organizational performance: Lessons from Australian performing arts. *German Journal of Human Resource Management*, 0(0). <a href="https://doi.org/10.1177/23970022241231538">https://doi.org/10.1177/23970022241231538</a>

Pearson, C. M. & Mitroff, I. I. (1993). From crisis prone to crisis prepared: A framework for crisis management. *Academy of Management Executive*, 7(1), 48-59.

Pearson, C. M., Roux-Dufort, C. & Clair, J. A. (2007). *International handbook of organizational crisis management*. Sage.

Preble, J. F. (1997). Integrating the crisis management perspective into the strategic management process. *Journal of Management Studies*, 34(5), 769-791.

Roberts, B. & Lajtha, C. (2002). A new approach to crisis management. *Journal of Contingencies and Crisis Management*, 10(3), 181-191.

Roche, W. K., Teague, P., Coughlan, A. & Fahy, M. (2011). Human resources in the recession: Managing and representing people at work in Ireland. *University College Dublin*.

Saleh, Y. & Al-Rabadi, R. (2020). Sectoral variations in HR strategies during economic crises in Jordan. *Jordanian Journal of Economic Sciences*, 17(2), 88-104.

Sarstedt, M. & Mooi, E. (2014). A concise guide to market research: The process, data, and methods using IBM SPSS statistics. Springer. https://doi.org/10.1007/978-3-642-53965-7\_7

- Sayegh, L., Anthony, W. P. & Perrewe, P. L. (2004). Managerial decision making under crisis: The role of emotion in an intuitive decision process. *Human Resource Management Review*, *14*(2), 179-199.
- Severo, E. A., Sbardelotto, B., de Guimarães, J. C. F. & de Vasconcelos, C. R. M. (2020). Project management and innovation practices: Backgrounds of the sustainable competitive advantage in Southern Brazil enterprises. *Production Planning & Control*, 31(14), 1276-1290. https://doi.org/10.1080/09537287.2019.1702734
- Shala, B., Prebreza, A. and Ramosaj, B. (2021), The Contingency Theory of Management as a Factor of Acknowledging the Leaders-Managers of Our Time Study Case: The Practice of the Contingency Theory in the Company Avrios. *Open Access Library Journal*, 8: e7850. <a href="https://doi.org/10.4236/oalib.1107850">https://doi.org/10.4236/oalib.1107850</a>
- Shayb, H. & Muşetescu, R. (2020). Business strategy during crisis. *Proceedings of the International Conference on Business Excellence*, 14, 263-272. https://doi.org/10.2478/picbe-2020-0025
- Sheaffer, Z. & Mano-Negrin, R. (2003). Executives' orientations as indicators of crisis management policies and practices. *Journal of Management Studies*, 40(2), 573-606.
- Storey, J. (2007). Human resource management: A critical text. Cengage Learning EMEA.
- Topper, B. & Lagadec, P. (2013). Fractal crises—a new path for crisis theory and management. *Journal of Contingencies and Crisis Management*, 21(1), 4-16.
- Vouzas, F. & Nizamidou, C. (2018). Crisis management awareness in the food-agricultural industry: Insights from a leading export Greek SME. *Global Business & Economics Anthology*, *1*(1), 80-94.
- Wang, J., Hutchins, H. M. & Garavan, T. N. (2009). Exploring the strategic role of human resource development in organizational crisis management. *Human Resource Development Review*, 8(1), 22-53.
- Weiner, D. (2006). Crisis communications: Managing corporate reputation in the court of public opinion. *The Workplace*.
- Wognum, I. & Lam, J. F. (2000). Stakeholder involvement in strategic HRD aligning: The impact on HRD effectiveness. *International Journal of Training and Development*, 4(2), 98-110.
- Yawson, R. (2013). Systems theory and thinking as a foundational theory in human resource development: A myth or reality? *Human Resource Development Review*, 12(1), 53-83. <a href="https://doi.org/10.1177/1534484312461634">https://doi.org/10.1177/1534484312461634</a>
- Yi, K., Li, Y., Peng, H., Wang, X. & Tu, R. (2021). Empathic psychology: A code of risk prevention and control for behavior guidance in the multicultural context. *Frontiers in Psychology*, *12*, 781710. https://doi.org/10.3389/fpsyg.2021.781710
- Zacher, H. & Rudolph, C. W. (2022). Researching employee experiences and behavior in times of crisis: Theoretical and methodological considerations and implications for human resource management. *German Journal of Human Resource Management: Zeitschrift Für Personalforschung*, *36*(1), 6-31. <a href="https://doi.org/10.1177/23970022211058812">https://doi.org/10.1177/23970022211058812</a>
- Zavyalova, A., Pfarrer, M. D., Reger, R. K. & Hubbard, T. D. (2016). Reputation as a benefit and a burden? How stakeholders' organizational identification affects the role of reputation following a negative event. *Academy of Management Journal*, *59*(1), 253-276.
- Zhou, S.P. & Liu, G.S. (2013). The application of contingency theory in the every development stage of cluster supply-chain. *Applied Mechanics and Materials*, 278, 2132-2136. https://doi.org/10.4028/www.scientific.net/AMM.278-280.2132