

THE EFFECT OF HUMAN RESOURCE FLEXIBILITY ON CRISES MANAGEMENT EFFECTIVENESS IN JORDANIAN CONTRACTING COMPANIES

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ABSTRACT

The study aimed to verify the effect of human resource flexibility on crisis management effectiveness in Jordanian Contracting Companies. To measure human resource flexibility, a three-dimensional scale was adopted: skills flexibility, behaviour flexibility and practices flexibility. To measure crisis management effectiveness, a three-dimensional component was used: responsiveness, communication and information, and resource mobilization. To achieve the aims of the study, an online survey of Human Resource Leads in Contracting Companies was issued and the researchers used a descriptive analytical method to scrutinize the results. To achieve the aims of the study researchers used descriptive analytical method.

The study was conducted on a sample consisting of (237) companies which were active in the field of contracting. The results, analysed using regression analysis, indicated that there were medium levels of human resource flexibility and crisis management effectiveness in the sample companies. Overall, in line with the results of other similar studies, the findings suggested that human resource flexibility has a significant impact on crisis management effectiveness. This means that whenever a company has a high level of flexibility in its human resources in terms of skill, behaviour and practices, the more effective it is in responding to crises; in its ability to communicate and provide information; and in mobilizing the necessary resources to effectively face crisis situations. This study aims to add to the body of evidence in this increasingly debated field of work in the context of a developing country.

Based on the findings recommendations for practice are identified including: increasing a focus on investing in developing the skills of the workforce to make it more adaptive and responsive; using performance management systems to incentivize employees; and through improving information and communication systems so that crisis management can be more effective and the impact of crises can be minimized.

Keywords: Human Resource Flexibility; Crises Management Effectiveness; Contracting Companies; Jordan.

INTRODUCTION

Although the occurrence of crises is a longstanding issue, the awareness of this in administrative decision makers has not crystallized until more recently, because of the acceleration, diversity and severity of sudden transformations in situations, and the eliminated spatial and temporal dimensions between the events and those who are concerned. This is in addition to organizations abandoning their loyalty and the increase in administrative entities feeling part of the greater and wider world than their former specific and limited self-entity

(Komasawa et al., 2018). All of this has forced the sense of a global crisis to services whatever their locality. Today, the use of scientific methods as a way for dealing with crises has become more important and a necessity not only for achieving positive results, but also because the use of un-scientific alternatives can deliver results which may be greatly destructive (Kahn & Sachs, 2018). As a result of the importance and risk associated with the crises, their management and treatment with advanced managerial thinking is key. For organizations in developing countries, there is a need to follow in the steps of those operating in the developed world, with managerial leaders in these organizations making their decisions far from randomly and using partial emotions, to instead bridge the gap between their organizations and organizations of the advanced countries (Easton, 2017; Abu-Rumman, 2019). This study therefore aimed to focus on this gap and make a valuable contribution in adding to the body of evidence in this increasingly debated field, but within the context of companies operating in a developing country.

Crisis management as a concept has flourished in public administration science where it is now being used as a new method adopted by governmental authorities and public organizations to accomplish urgent tasks or to solve urgent dilemmas. This has resulted in the appearance of special tasks forces, management by exclusion, management by objectives and results, and project management, to manage the severe and explosive problems of issues such as crisis management (Watson et al., 2017). When the features of this method had become established, the question arose about the possibility of transforming it into an integrated model of crisis management, by setting the organizational principles and rules for it to operate and to distinguish mechanisms in confronting multiple, spontaneous and successive crises (Kuzmanova, 2016). Crisis management proposes that a crisis is overcome through the use of different scientific managerial instruments; avoiding their negative effects and maximizing the impact from their positive effects.

This article begins by presenting the theoretical background underpinning the study, followed by a critical review of the current and relevant literature. The methodology and context of the study are then explained, followed by a statistical analysis of the results. The paper ends by discussing and concluding the key points and making recommendations for future practice.

THEORETICAL BACKGROUND

This article makes a theoretical contribution to this field of inquiry through the investigation a new relationship between different concepts of flexibility and testing different hypotheses of a previously tested theory that purports that human resource flexibility has an impact on crisis management (Salamzadeh, 2020).

Human Resources Flexibility

Innovative and creative activities in organizations depend on human resource knowledge; the level of their skills and on the degree of their commitment.

The way in which organizations accommodate their employees' skills and behaviours, and their human resource management practices in response to the changes that occur in modern day dynamic environments, call for human resource flexibility which is considered an important factor in achieving competitive advantage and rising organizational performance (Tuan, 2016). Since rapid dynamic changes in the external environment push organizations to adopt a chain of changes to adjust with the new conditions, and with most of these changes requiring investment in human resource systems to make them more flexible; this has led to a

change in the human resource management (HRM) function to make it into a more strategic role that justifies the need for flexible systems to deal with human resources (Lastra et al., 2014). So, it is possible to view human resource flexibility as a dynamic capability for organizations because it focuses on the organization's internal adjustment with the changing environment in the shadow of a high degree of uncertainty to guarantee a rapid and effective response to strategic demand (Do et al., 2016). Human resources flexibility expresses HRM ability in the organization by helping it in the delivery of adjustment and effective 'just-in-time' responses aligned with internal and external environmental changes. This is achieved through activating internal and external communications and developing workforce skills and the behaviour, and reformulating them, which in turn helps to lead to greater creativity and innovation, and ultimately the achievement of increased competitive advantage for the organization (Al-Tai & Altameemi, 2016).

Human resources flexibility is created from a chain of flexible organizational policies and practices designed to manage employees, which create in them sense of job security, and a feeling that their organization cares about their well-being, needs, problems, and helping them in dealing with their work requirements (Michel & Michel, 2013). Human resource flexibility is defined as the extent to which human resources in the organization possess the skills and behaviours to be able to develop strategic alternatives in frame of its competitive environment (Úbeda-García et al., 2017) and incorporates three elements: employee' skills, behaviour, and HRM practices (Esfahani et al., 2017). It is a concept that transforms skills and behaviours into new strategic alternatives in the organization's competitive environment that can be developed and executed rapidly to achieve maximum benefit with minimal adjustment (Ngo et al., 2012).

Human resources flexibility is also considered generally as utilizing the wide and diversified skills of the workforce, and having the ability to change their behaviours according to new situations. This stems from them having a high degree of control and engagement in their work, and the ability of the organization to modify human resource practices in accordance with internal and external environmental changes. It allows organizations to respond to changes in market requirements, gives them the ability to adjust, and ultimately work successfully in dynamic environments (Pradhan et al., 2017).

Human resources flexibility focuses on the nature of talented employees regarding their experiences, behaviour, and their learning, and focuses on the ability to develop HRM systems in the organization as a whole to compete on the basis of rapid responses to the environment (Kumari & Pradhan, 2014). It is considered to be a dynamic capability at the organization level, and consists of individuals who possess diversified skills and behavioural references, and also consists of HR practices that can be effectively be used to respond to the changes in market requirements (Way et al., 2015). Therefore, the independent variables which will be measured in this research study which represent HR flexibility are through three dimensions: skills flexibility; behaviour flexibility; and practices flexibility (Way et al., 2015; Al-Tai & Al-Tamimi, 2016; Do et al., 2016; Tuan, 2016; Úbeda-García et al., 2017; Pradhan et al., 2017).

Skills flexibility

Organizations that have skills flexibility feature employees who are characterized by having flexible skills to produce new and different products and ideas than those which currently exist (Hegazy & Maalim, 2013). Skills flexibility asserts that employees possess the required skills to perform their jobs and the ability to use and change those skills rapidly to help them in performing a wide range of new work activities successfully.

This in turn helps an organization to expand its offered products, and satisfy customers changing needs and preferences (Way et al., 2015). According to Pradhan et al. (2017), skills flexibility requires employees to possess the skills to perform their roles, activities, and tasks, and the ability to use alternative and new techniques. Also, skills flexibility purports that employees have the ability to learn and apply new skills, manage their present skills, and show enthusiasm to learn new skills through looking at new events and changes as an opportunity to learn something new (Al-Tai & Al-Tamimi, 2016). It also may involve changes in reimbursement packages to enable the rapid redistribution of employees with different skills as and when needed (Esfahani et al., 2017).

Behaviour flexibility

Behaviour flexibility is linked with the adjustment to new situations, getting away from routine behaviour, and the aptitude to use new behaviour and accommodating them according to the requirements of each situation (Pradhan et al., 2017). It is for this reason that employees require ongoing training, and the organisation needs to constantly predict the organization's needs of future skills. There is also the need to have enthusiasm from employees to learn new methods for undertaking present and new tasks, looking at each incident that occurs in the organization as a way to learn something important for the future (Úbeda-García et al., 2017). To be able to apply these behaviours appropriately, in shadow of ever-changing conditions, instead of following fixed and specific procedures, the organization needs to agile and flexible to adapt and respond (Do et al., 2016; Ngo et al., 2012).

Practices flexibility

Practice flexibility indicates the degree to which it is possible to accommodate and modify HRM functions, and apply them inside the organization to respond to internal and external environmental changes (Úbeda-García et al., 2017; Alkhazali et al., 2020). This involve the ability to modify HR practices in the organization such as HR performance evaluation systems and rewards systems, to provide incentives for employees to adapt and change (Way et al., 2015). Furthermore, HR practices need to promote employee empowerment; increasing their ability to accede their roles, and adjust to new roles (Tuan, 2016). This helps organizations achieve sustainable competitive advantage through building an enthusiastic and motivated HR base, and the ability to merge and re-formulate it to deal with environmental changes (Bamel & Stokes, 2016). HR practice flexibility provides the knowledge and skills needed for employees to adjust with new roles or the new work paths, supported by HRM functions which enable employees to develop adjustable behaviour, through having flexible training and support, so that they can effectively carry out new roles (Tuan, 2016).

Crisis Management Effectiveness

Several industrial sectors are particularly vulnerable to different types of crises including natural disasters, political instability, terrorist attacks, infectious diseases, industrial accidents, economic recession, and other crises. The presence of such crises create pressure on business managers to plan and think strategically by managing the positive opportunities and negative threats that crises present (Kahn, 2018). Crisis management can be achieved through the use of one or more of the following modes including cooperation, confrontation, escaping, containment, or segmenting the crisis.

Crisis management has been defined as “the process that attempts to identify and predicts areas of crises, the development of actions or measures designed to prevent crises from occurring, minimizing the effects of disruption from a crisis. In this study, the researchers relied on the following three dimensions to measure crisis management effectiveness:

Responsiveness

Effective management of crisis must plan for appropriate responses to help a company’s employees to improve their skills in handling unanticipated challenges, from such situations, strategic planning is becoming critical to make sure that the business organization is ready and prepared to meet future difficulties (Al-Khrabsheh, 2018). Responding to a crisis can be described as active preparation for worst case situations through devising strategies that can minimize adverse effects on operations in both the short and long term (Vargo & Seville, 2011). Since crises are incidents that suddenly occur, they demand quick responses. When companies are prepared for responding to a crisis, the better they will be able to handle and deal with a crisis through the decisions the managers made in order to minimize the negative influences of crisis situations (Almudallal et al., 2016).

Communication and information

Crisis situations can happen at any time, everywhere, and to anybody, but handling a crisis situation requires good communication, since the success rate in minimizing damage often depends on what is communicated to who, and how. Crisis communication is very important between management teams and employees in any organization. It is considered as a distinct activity in the organization, through integrating crisis management with crisis communication in different strategies and tactics of the business (Bernstein, 2011). A recent corporate crisis- the Macondo oil spill in the Gulf of Mexico, has shed new light on the importance of information and communication. In this case, there was a lack of technological, sociological and organizational communication. Nwabueze & Mileski (2018) include strategic planning, strategic formulation, application and analysis as also being key in relation to communication.

Resource mobilization

Good crisis management depends on management's ability to mobilize all available material resources to help the organization to cope with the crisis. At this stage comes the importance of a strategic inventory and its use to confront the crisis (Granville et al., 2016). Crisis management must consider all available resources, determine their flexibility, and define the organizational paths for the movement of these resources at the appropriate speed. These resources are limited, whether they are currently available or in the form of a strategic reserve, as well as what can be provided in the future. The inventory process should be comprehensive and cost-effective (Nwabueze & Mileski, 2018).

LITERATURE REVIEW AND HYPOTHESES

Crisis management has been the focus of much interest from both business organizations and researchers. This phenomenon has been addressed from different perspectives and led to differing results. Lin et al. (2016) found that crisis management mechanisms have been linked directly with the changes taking place in the external

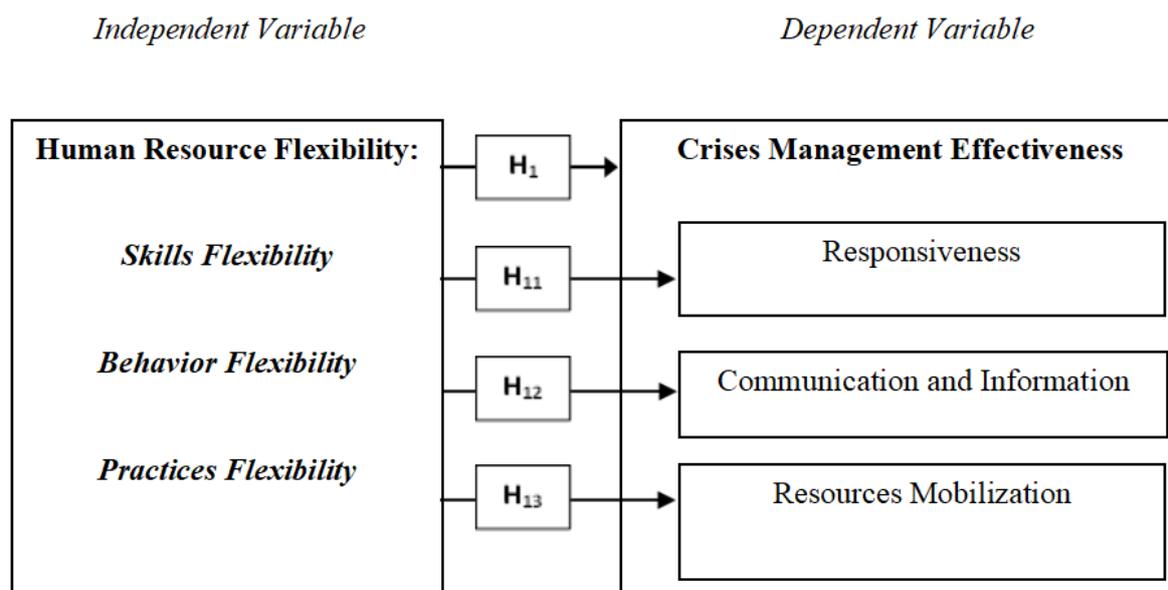
environment surrounding public hospitals, and the extent of the presence of a system of monitoring the medical and managerial errors in the internal environment. While a study conducted by Cole (2015) demonstrated the importance of planning for a crisis, and argued that the existence of an effective plan for rapid and effective response to crises depends on effective leadership.

In another study conducted by Marshall (2015), the aptitudes stage and discovering a crisis was emphasized, and was considered to be one of the most important stages in helping management reduce the effects of natural and human crises.

Abouraia (2018) instead focused on the basic causes of crisis occurrence in airline flights including: distraction, stress, pressure, terrorism, lack of communication, lack of knowledge, teamwork, and awareness. Another study conducted by Hussein (2017) reviewed the basic causes of crisis occurrence including the spread of rumours during the crisis occurrence, ambiguity of the role of concerned parties in managing a crisis, following a centralized method in making decisions, and the absence of clear strategic planning to confront the crisis. Sama'neh & Al-Khadam (2017) found from their study of crisis management that there was an absence of clear interest in the processes relating to strategic planning, and the presence of differences in the employees' estimation of crisis management methods. They claimed that this could be attributed to gender, level of experience, and role variances. In another study conducted by Ja'afar (2018), the results emphasized the importance of strategic planning and crisis management when dealing with a crisis in public institutions. Similarly, in a study conducted by Ghazi (2017) study, the existence of a correlation between strategic planning processes and crisis management methods was confirmed; with a negative correlation between strategic planning and the escape method, and positive correlation between strategic planning and the confrontation, cooperation, and containment method. While Al-Shobaki et al. (2016) study revealed that top management provides the required human resources for the strategic planning but without financial support, there are deficits for the organization managing the crisis both before and after its occurrence.

Kahn (2018) concurred with these conclusions and also reinforced the need for strategic planning in times of crisis. From a different perspective, a study conducted by Bedawd (2019) showed the presence of a relationship and significant influence between processes strategy and crisis management effectiveness, in the same direction. Abdal-Fattah et al. (2019) study also showed the presence of an influence and significant relation between requirements of strategic planning success and crisis management strategies. Al-Megtheb (2014) highlighted the importance of administrative empowerment in crisis management effectiveness, and the basic elements supporting the organization.

Similarly, Al-Tai & Al-Tamimi (2016) study found that HR flexibility in team work performance, and skills flexibility, received the highest correlation values, confirming its effective role in the keeping up the pace of the business accomplishments, and adjusting with occurring changes. Furthermore, Mohamed (2013) study demonstrated the presence of a correlation between HR flexibility and operational performance indicators (effectiveness and competence), while results from Nikkhah et al. (2019) study confirmed the presence of significant relationship between HR flexibility and employees' productivity and skills. They found that flexibility has big role in raising effectiveness which positively reflects on the employees' productivity. Pradhan et al., (2017) found that HR flexibility in organizational effectiveness and organizational citizenship behaviour has great influence and impact on HR flexibility and organizational effectiveness. Given the findings discussed above from other similar studies, Figure 1 illustrates the research model that was developed for this research study:

**FIGURE 1****RESEARCH MODEL**

In light of the results from the previous studies discussed above relating to the potential relationship between human resource flexibility and the different components of crisis management and the model illustrated in Figure 1; the researchers formulated and prioritised the following hypotheses, previously investigated individually elsewhere, to test as part of this study:

H1: There is an effect of human resource flexibility on crisis management effectiveness of Jordanian Contracting Companies.

H11: There is an effect of human resource flexibility on responsiveness of Jordanian Contracting Companies.

H12: There is an effect of human resource flexibility on communication and information of Jordanian Contracting Companies.

H13: There is an effect of human resource flexibility on resource mobilization of Jordanian Contracting Companies.

RESEARCH METHODOLOGY**Sample Population**

The study population represents the entire first and second category contracting companies operating in the capital of Jordan, resulting in (292) companies registered in the Contractors Union in Jordan for the year 2020. The researchers conducted a comprehensive survey of these companies by distributing an anonymous, electronic questionnaire to their Head of HR asking for their view on human resources flexibility and the management of crises, along with a description of the study and an explanation on how the results would be used. The survey was first piloted with a sample of HR Professionals working within the contracting and construction sector before being used for the wider survey population. The number of

companies that participated in the survey was (237) companies. This represents the number of questionnaires that were subjected to statistical analysis.

Contracting companies in Jordan were selected as the focus of this study as the sector has experienced a continued period of recent growth and investment (Sweis, 2010), but remains a sector that is considered to be particularly susceptible and easily impacted on by the external environment resulting in delays, reduced quality, waste and reduced productivity. It is therefore a sector more prone to having to deal with different crises (Albalkhy & Sweis, 2019).

Measurement

To measure the study variables, the researchers investigated the measures used in previous studies that were tried and indicated a high degree of reliability. To measure human resource flexibility, a three-dimensional scale was used: skills flexibility, behaviour flexibility, and practices flexibility proposed by Way et al. (2015) comprising of 22 items distributed by 8 items for skills flexibility, 6 items for behaviour flexibility and 8 items for practices flexibility. To measure crisis management effectiveness, the scale mentioned in the Bedawd (2019) study was used comprising of three dimensions: responsiveness, communication and information, and resource mobilization consisting of 12 items distributed by 4 items for responsiveness, 4 items for communication and information, and 4 items for resource mobilization. Table 1 shows the Cronbach alpha values for these measures, which exceeded (0.70) and are the lowest value that can be accepted for the purposes of statistical analysis (Sekaran & Bougie, 2012).

FINDINGS

Table (1) shows the results of the descriptive analysis of the collected data. The results indicated that there are medium levels of dimensional behavioural flexibility and practices flexibility with an average of (3.521, 3.548). While level of skills flexibility was high with an average value of (3.760). As for the dimensions of crisis management effectiveness, the results of the analysis indicated that mean values of all of them were at intermediate levels (3.481, 3.617, 3.583) higher for communications and information.

Variables	Items	Alpha	Mean	Std.
Skills flexibility	8	0.860	3.760	0.690
Behaviour flexibility	6	0.872	3.521	0.820
Practices flexibility	8	0.792	3.548	0.634
Responsiveness	4	0.819	3.481	0.711
Communication and Information	4	0.894	3.617	0.692
Resources Mobilization	4	0.786	3.583	0.684

H1: There is effect of human resource flexibility on crisis management effectiveness of Jordanian Contracting Companies.

Dimension	B	T	Sig.
Skills flexibility	0.364	3.434	0.001
Behaviour flexibility	0.125	1.374	0.171
Practices flexibility	0.240	2.475	0.014

R = 0.470; R² = 0.221; F = 18.915; Sig. = 0.000

Table 2 indicates the results of the multiple regression on the effect of human resource flexibility on crisis management effectiveness in Jordanian contracting companies. The results showed that there is a significant effect of human resource flexibility on crisis management effectiveness, where the value of R² reached (0.221). This means that flexibility of human resource explained (22.1%) of the variation in crisis management effectiveness and the value of F (18.915) reached the level of Sig. (0.000).

Regarding the effect of each dimension of human resource flexibility, it was found that there was a significant effect of two dimensions of human resource flexibility on crisis management effectiveness, namely: skills flexibility and practices flexibility, as values of B (0.364, 0.240) and value of T (3.434, 2.475) significantly (0.000). While behaviour flexibility did not have a significant effect on crisis management effectiveness, as the effect of Sig. reached (0.171) which is greater than (0.05).

H2: There is effect of human resource flexibility on responsiveness of Jordanian Contracting Companies.

R	R²	B	F	Sig.
0.268	0.072	0.388	15.681	0.000

Table 3 presents the results of the simple regression analysis of the effect of human resource flexibility on responsiveness to crises. The results indicated that there was a significant effect of human resource flexibility on responsiveness to crises, as the value of R² (0.072) this means that human resource flexibility explained (7.2%) in the variation in responsiveness to crises. The value of B (0.388) and the value of F (15.681) were significantly (0.000).

H3: There is effect of human resource flexibility on communication and information of Jordanian Contracting Companies.

Table 4 presents the results of the simple regression analysis of the effect of human resource flexibility on communication and information. The results indicated that there is a significant effect of human resource flexibility on communication and information, where the

value of R^2 (0.156). This means that human resource flexibility explained (15.6%) in the variance in communications and information. The value of B (0.603) and the value of F (37.401) were significantly (0.000).

R	R²	B	F	Sig.
0.395	0.156	0.603	37.401	0.000

H4: There is effect of human resource flexibility on resource mobilization of Jordanian Contracting Companies.

Table 5 presents the results of the simple regression analysis of the effect of human resource flexibility on resource mobilization. The results indicated that there is a significant effect of human resource flexibility on resource mobilization as the value of R^2 (0.135) this means that the flexibility of human resource flexibility explained (13.5%) in the variance in resource mobilization. The value of B (0.508) and the value of F (31.426) were significantly (0.000).

R	R²	B	F	Sig.
0.367	0.135	0.508	31.426	0.000

DISCUSSION

In this study, the researchers tried to test the effect of human resource flexibility on crisis management effectiveness in Jordanian Contracting Companies. Following research and analysis, the study results indicated that there are medium levels of two dimensions of human resource flexibility; namely behaviour flexibility and practices flexibility, while the level of skills flexibility was high. The researchers believe that the nature of the activity practiced by these companies needs a high degree of flexibility for the purpose of applying the principle of substitution among employees according to what the work need requires. On the contrary, the need for flexibility in behaviour may be less due to the limited interaction of employees in these companies with parties outside the company's borders, which makes the presence of medium levels of behaviour flexibility a natural matter. The results showed that there are medium levels for all dimensions of crisis management effectiveness, as these companies suffer from some kind of slow pace in responsiveness and taking appropriate decisions to face the crises they are exposed to- in addition to not having the necessary capacity to mobilize resources, whether material or moral, to confront these crises. The results showed that there is a significant effect of human resource flexibility on crisis management effectiveness, especially after dimension skills flexibility and practices flexibility, as these companies need, at the time of exposure to crises, to have employees who have multiple skills for the purpose of maneuvering them and converting them to work in other disciplines as needed.

The results demonstrated, in line with the results from other studies discussed in this article, that there is a significant effect of human resource flexibility on all dimensions of crisis

management effectiveness. This means that whenever a company has high flexibility in its human resource in terms of skill, behaviour and practices, the more effective it is in: responding to crises; its ability to communicate and provide information; and in mobilizing the necessary resources to effectively face and respond to crises.

RECOMMENDATIONS AND IMPLICATIONS FOR PRACTICE

1. There is an imperative to increase the interest of contracting companies in developing the skills of their employees because of the importance associated with their ability to learn and carry out new work activities, enabling the company to expand the scope of its services in an effort to meet the changing needs and preferences of its customers. To achieve this, these companies can use the work team's mechanism to raise the skills of their employees, in addition to using job recycling for employees.
2. Contracting companies should pay attention to human resource management practices and their applications in a manner that ensures their response to appropriate changes in the internal and external environment. This can be achieved by adopting a performance appraisal system that encourages initiative in order to respond to the dynamic changes taking place in the environment.
3. The need for contracting companies to recognize the importance of rapid response to crises and to take appropriate decisions so that they can stop them in their initial stages or reduce their negative effects. This can be achieved by collecting all the necessary information on them from all parties and facilitating the communication process to obtain creative ideas that help reduce the strength of the crisis and its repercussions, in addition to quickly diagnosing the company's resources and using them economically.

LIMITATIONS

Although this study has provided some new and additional evidence to add to the debate about the impact of human resources flexibility in relation to crisis management, there are a number of limitations to be acknowledged. Firstly, the survey only elicited the views of HR professionals working within contracting companies and there may be merit in comparing this view with those of front-line employees or operational leads. In addition, the study only focused on the experiences within the contracting sector in Jordan and it may be useful to examine, in the future, the experience in other sectors and in other more developed countries. Finally, further exploration of the ways in which human resource flexibility works and which aspects are most influential in dealing with crises would be a worthy area for future research.

REFERENCES

- Abdal-Fattah, A., Badawi, N. A., & Rajab, S. I. (2019). Requirements for strategic planning success and impact on crisis management strategies. *AL-Anbar University journal of Economic and Administration Sciences*, 11(26), 583-601.
- Abouraia, M. (2018). Organizational learning: An assessment of its impact on crisis management in the United Arab Emirates. *International Journal of Learning and Development*, 8(1), 1-20.
- Abu-Rumman, A. (2019). Challenging tradition: Exploring the transition towards university entrepreneurialism. *Academy of Entrepreneurship Journal*, 25(2), 1-15.
- Albalkhy, W., & Sweis, R. (2019). Assessing lean construction conformance amongst the second-grade Jordanian construction contractors. *International Journal of Construction Management*, 2019, 1-13.
- Alkhazali, Z., Abu-Rumman, A., Khdour, N. & Al-Daoud, K. (2020). Empowerment, HRM practices and organizational performance: a case study of Jordanian commercial banks. *Entrepreneurship and Sustainability Issues*, 7(4), 2991-3000.

- Al-Khrabsheh, A. A. (2018). Impact of Strategic Planning on Crisis Management in the Profit and Non-Profit Sector in Jordan. *Academy of Strategic Management Journal*, 17(5), 1-12.
- Al-Megtheb, D. (2014). Review: information management and information management systems: Conceptual foundation and research issues. *MIS Quarterly*, 25(2), 62-81.
- Almudallal, M. W., Ashary, H., & Muktar, S. N. (2016). Influence of strategic planning on crisis management in the service sector firms in Palestine. *Journal of Business and Social Review in Emerging Economies*, 2(1), 13-20.
- Al-Shobaki, J. Abu Amuna, S. & Abu Naser, S. (2016). Impact of top management support for strategic planning on crisis management: Case study on UNRWA-Gaza strip. *International Journal of Academic Research and Development*, 1(10), 20-25.
- Al-Tai, A., & Al-Tamimi, M. (2016). The impact of human resources resilience on the performance of work teams: An exploratory study in the Bureau of Financial Control. *University Heritage College Journal*, 1(20), 35-67.
- Bamel, U., & Stokes, P. (2016). Flexible HR practice. *Global Journal of Flexible Systems Management*, 17(1), 1-3.
- Bedawd, I. I. H. (2019). The components of operations strategy and its role in enhancing crisis management effectiveness (an exploratory study of the views of managers in the Badoush Expansion Cement Factory). *Al-Rafidain Development*, 123(138), 90-104.
- Bernstein, J. (2011). *Manager's Guide to Crisis Management*. McGraw-Hill.
- Cole, T. (2015). *Evaluation of Crisis Management Plan: An Analysis of Primary Schools in Jamaica*. Doctoral Dissertations, Thomas University, Miami Gardens, Florida, (UMI No. 10036929).
- Do, B-R., Yeh, P-W., & Madsen, J. (2016). Exploring the relationship among human resource flexibility, organizational innovation and adaptability culture. *Chinese Management Studies*, 10(4), 657-674.
- Easton, C. (2017). Analysing the Role of Privacy Impact Assessments in Technological Development for Crisis Management. *Journal of Contingencies and Crisis Management*, 25(1), 7-14.
- Esfahani, S., Rezaei, H., Koochmeshki, N., & Parsa, S. (2017). Sustainable and flexible human resource management for innovative organizations. *AD-minister Journal*, 1(30), 195-215.
- Ghazi, K. (2017). The impact of strategic planning on crisis management styles in the 5- star hotels. *Journal of Tourism Research*, 17(18), 1-16.
- Granville, F., Mehta, A., & Pike, S. (2016). Destinations, disasters and public relations: Stakeholder engagement in multi-phase disaster management. *Journal of Hospitality and Tourism Management*, 28, 73-79.
- Hegazy, I., & Maalim, S. (2013). *Facilitating human resources through skills*. Jordan, Amman: Osama House Publishing.
- Hussein, A. (2017). *Crisis management and its relationship to strategic planning from the point of view of administrators and financiers at the Independence University- Palestine*. Proceedings of Al-Zaytoonah University conference, Jordan.
- Ja'afar, Y. (2018). Effect of Strategic Planning on Crisis Management: An Applied Study Public Institutions in Jerusalem Regions. *Journal of Al-Aqsa University*, 21(1): 293-324.
- Kahn, M. J., & Sachs, B. P. (2018). Crises and Turnaround Management: Lessons Learned from Recovery of New Orleans and Tulane University Following Hurricane Katrina. *Rambam Maimonides Medical Journal*, 9(4), 1-9.
- Komasawa, N., Berg, B. W., & Minam, T. (2018). Problem-based learning for anesthesia resident operating room crisis management training. *PLOS ONE*, 19, 1-10.
- Kumari, I., & Pradhan, R. (2014). Human resource flexibility and organizational effectiveness: Role of organizational citizenship behavior and Employee Intent to Stay. *International Journal of Business and Management Invention*, 3(11), 43-51.
- Kuzmanova, M. (2016). Contemporary problems related to crisis management of organizations. *Trakia Journal of Sciences*, 3, 256-261.
- Lastra, S., Alcázar, F., & Gardey, G. (2014). Functional flexibility in human resource management systems: Conceptualization and measurement. *International Journal of Business Administration*, 5(1), 1-14.
- Lin, W. B., Lee, S., & Tsao, M. L. (2016). Establishment of Crisis Management Mechanisms in Public Hospitals. *International Journal of Organizational Innovation (Online)*, 8(3), 186.
- Marshall, J. (2015). Rating the Cities: Constructing a City Resilience Index for Assessing the Effect of State and Local Laws on Long-Term Recovery from Crisis and Disaster. *Tulane Law Review*, 90(1), 35-74.
- Michel, R., & Michel, C. (2013). Human resource flexibility and the relationship between work-family enrichment and job satisfaction: regression analysis. *Horizons Empresariales*. 12(1), 53-62.
- Mohamed, A. (2013). The effect of strategic human resource flexibility on improving operational performance. An exploratory study of the opinions of a sample of managers, engineers, and technicians in the

- Directorate of South Baghdad Gas Power Station/Second. *Accounting and Financial Studies Journal*, 8(23), 370-399.
- Ngo, H-Y., Loi, R., & Foley, S. (2012). Human resources flexibility in foreign subsidiaries: An empirical in Hong Kong. *International Journal of Business Studies*, 20(1), 11-26.
- Nikkhah, M., Niya, H., & Moradi, A. (2019). Human resources flexibility and labor productivity in Ahvaz gas company. *Management Studies Journal*, 1(1), 35-47.
- Nwabueze, U., & Mileski, J. (2018). Achieving competitive advantage through effective communication in a global environment. *Journal of International Studies*, 11(1), 50-66.
- Pradhan, R. K., Kumari, I. G., & Kumar, Updesh (2017). Human resource flexibility and organizational effectiveness: Mediating role of organizational citizenship behaviour. *International Journal of Human Resources Development and Management*, 17(3/4), 282-300.
- Salamzadeh, A. (2020). What Constitutes A Theoretical Contribution? *Journal of Organizational Culture, Communications and Conflict*, 24(1), 1-2.
- Sama'neh, S., & Al-Khaddam, H. (2017). *Crisis Management Methods and their Relationship with Strategic Planning at Jordanian Ministry of Internal*. Center of Studies and Research, King Fahed Security College, Al-Riyadh, 1(1): 1-54.
- Sekaran, U., & Bougie, R. (2012). *Research methods for business: A skill building approach*, (6th ed). New York, NY: John Wiley & Sons Inc.
- Sweis, R. J. (2010). The relationship between information technology adoption and job satisfaction in contracting companies in Jordan. *Journal of information technology in construction*, 15, 44-63.
- Tuan, L. T. (2016). How HR flexibility contributes to customer value co-creation behavior. Marketing Intelligence & Planning. *International Journal of Contemporary Hospitality Management*, 34(5), 646- 670.
- Úbeda-García, M., Cortés, E., García, L., & Zaragoza Sáez, P. (2017). Human resource flexibility and performance in the hotel industry: The role of organizational ambidexterity. *Emerald Personnel Review*, 46(4), 824-846.
- Vargo, J., & Seville, E. (2011). Crisis strategic planning for SMEs: finding the silver lining. *International Journal of Production Research*, 49(18), 5619-5635.
- Watson, H., Rachel, L., & Wadhwa, K. (2017). Organizational and Societal Impacts of Big Data in Crisis Management. *Journal of Contingencies and Crisis Management*, 25(1), 15-22.
- Way, S. A., Tracey, J. B., Fay, C. H., Wright, P. M., Snell, S. A., Chang, S., & Gong, Y. (2015). Validation of a multidimensional HR flexibility measure. *Journal of Management*, 41(4), 1098-1131.