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The Impact of Humanitarian Supply Chain on Non-Government Organizations Performance Moderated by Organisation Culture

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ABSTRACT

The current research seeks to understand how humanitarian supply chains affect the performance of non-governmental organizations in Jordan. This humanitarian sector is the central pillar to alleviate the burden of asylum and the suffering of displaced people from neighbouring countries and survivors of civil wars like the Syrian civil war. The descriptive statistical analysis approach was used and a program was adopted SMART PLS This research is considered quantitative research, where the questionnaire tool was built, where the study population consisted of non-governmental organizations operating in Jordan, numbering 1640. The study population consisted of 311, and the questionnaire was distributed to executive and logistical support managers working in these organizations. After the response of the study sample, the search results in research results showed a statistically significant relationship between the research variables and the Performance of the organizations with the enhanced organizational culture. One of the most important recommendations recommended by the current study is to conduct more research related to humanitarian supply chains, and the current research recommends the need to test leadership as a mediating variable in the relationship between supply chains and the performance of organizations.

1. INTRODUCTION

The operating environment of non-profit organizations is not only constantly changing, but also growing more complicated, dynamic, and unpredictable. These organizations have encountered both possibilities and problems as a result of the changes in their work environments. However, these organizations must implement effective management strategies such as Supply Chain in order to capitalize on the potential and overcome the obstacles. In a highly complicated and conflict-ridden work environment, organizations must collaborate directly and enhance their performance through their supply chain. In this regard, prior research has shown that supply chain management (SCM) plays a crucial role in providing organizations with the competitive edge they need to enhance their organizational performance [1].

Frequently, preparations for actions connected to disaster relief start prior to the occurrence of a catastrophe. Humanitarian non-governmental groups must anticipate the need for relief materials after a disaster/catastrophic occurrence and then procure, store, and distribute them. In addition, the performance of the Humanitarian Supply Chain is influenced by both pre-disaster preparation and post-disaster results. Consequently, the planning operation of Humanitarian Supply Chain is essential for Humanitarian Supply Chain advancement [2]. Due to limited resources and finances, performance evaluation is seen essential for fulfilling humanitarian action objectives (saving lives and reducing the number of persons), ensuring donor funding (accountability), and maximizing economic efficiency. Humanitarian Supply Chain is the benchmark by which its operations' performance, such as effectiveness or competency, are measured. This strategy enables Humanitarian Supply Chain to maintain its position inside the humanitarian responsiveness "market" (order qualifier) [3].

There is a weakness in the performance of NGOs, and this is because of the numerous difficulties and negative effects that these organizations must deal with when working in Jordan, including a lack of economic diversity, cumbersome government regulations, and instability in neighboring nations [4]. It is necessary to handle these issues sustainably while considering the vulnerability and volatility of certain Arab nations as well as the geopolitical conflicts.

However, there is still no agreement on the key elements of the performance of NGOs; the majority of frameworks place an emphasis on the performance of projects and procedures while disregarding organizational functions and processes [5]. Consequently, it is essential to create a framework that covers the various NGOs' focus areas. Finance and administrative operations should adhere to the NGOs' practice framework. The plan/project performance can only be executed and completed by creating objectives, choosing performance indicators, collecting data, and analyzing indicators. While several definitions and management strategies for functional assessment and management in NGOs have been discussed in literature, sophisticated Performance is still lacking. there is

still much to learn about performance and administration in the humanitarian supply chain. However, the functioning and management of the humanitarian supply chain could be improved [2]. to increase organizational performance, the supply chain has become increasingly critica [6]. Flexibility and agility supply chain components are crucial to organizational performance [7].

Moreover, resilience, a transdisciplinary concept, is an organization's ability to resist hardship. Resilience supply chains improve organizational performance and quickly recover from disasters; thus scientists have paid attention to them [2]. When human-capable organizations use humanitarian workers to understand and explain disaster victims' needs, resilience emerges [8].

Finally, Organizational culture is often defined as an organization's values, attitudes, and actions. It greatly affects employee motivation, job satisfaction, and performance [9]. Organizational culture, the humanitarian supply chain, and NGO performance need additional study [10]. Since corporate culture is vital to the humanitarian supply chain, more study on organizational culture and NGOs' efficacy is needed [11]. Organizational culture may promote or hinder learning. This "human" aspect should bridge the primary and performance organizations. Altay et al. [2] examined how organizational culture and "supply chain agility/resilience" affect performance.

2. LITERATURE REVIEW

2.1 Supply chain flexibility

Flexibility is the capacity of an organization to function in a more chaotic environment [12, 13]. Volberda [14] defines flexibility as "the degree to which an organization has a range of managerial skills and the speed with which they may be activated to boost the management's control capacity and improve its controllability." As a result, we might argue that organizational flexibility can be seen as both a corporate design and a management duty. The organizational design challenge relates to the organization's capacity to promptly adapt to abrupt external changes. This focuses on the organization's controllability or changeability, which often depends on providing proper circumstances that support organizational flexibility. Manufacturing flexibility, for example, often necessitates versatile machinery, universal equipment, and a broad operational output repertory.

Similarly, flexibility in creativity necessitates multifunctional teams, low hierarchical levels, and minimal process rules. The management job refers to the managerial qualities that allow organizations to adapt to a tumultuous environment. Arawati [13] defined supply chain organizational flexibility as the capacity of supply chain managers to reorganize their internal supply networks rapidly and effectively to react to changing demand and supply market circumstances.

2.2 Supply chain agility

Agility was defined as Resilience and adaptation to respond to fast changes in supply and demand [15, 16]. However, there is a difference between agile and lean. Agile is characterized by flexibility, low predictive ability, sensitivity to the market, and the ability to work in a rapidly changing demand with various products. In contrast, capable experts work in large production, a few products, and a predictable environment [17]. In the early 1990s, agile manufacturing was proposed and executed to deal with customers' rapidly changing needs through flexibility and reconfiguration [18]. In a supply chain context, an organization's agility signifies the strength of contact between the organization and the market [19]. In this research, agility refers to a company's capacity to swiftly react to changes caused by catastrophes in diverse areas. This is predicated on [20] concept that the "real obstacles encountered in humanitarian supply chain vary on the extent, kind, and geography of the catastrophe where it happens." Floods and earthquakes, for example, wreak havoc on the country's physical infrastructure, causing several routing issues for relief supplies. Similarly, inventory management of relief materials is hampered after a natural catastrophe owing to security concerns.

2.3 Supply chain resilience

The resilience concept describes methods for dealing with interruptions in complicated supply networks [2, 11]. Indeed, Gligor and Holcomb [17] think supply chains must be resilient to deal with any disturbances.

Schniederjans et al. [21] defined Resilience as a system's ability to absorb and recover from catastrophic occurrences. More broadly, the United Nations defines Resilience as the ability of a system or society to adapt to disasters by resisting or adjusting to achieve an optimal level of functioning and structure [22]. This is influenced by how well civilizations can organize and learn from previous catastrophes. System capacity is called system capacity, the combination of all the resources, skills, and capacities available within the company, community, or whole supply chain that may assist minimize the impacts of a catastrophe [23]. Firms (retailers, wholesalers, and suppliers) should use risk control techniques to boost catastrophe resilience [24]. They must strike delicate stability between the productivity of S.C. and catastrophe risk mitigation. Although outsourcing from one supplier will boost profits, it often puts retailers at risk of catastrophe. Multisourcing would significantly raise transaction costs. So, businesses can perform a detailed cost-benefit review to enhance Resilience. They can also choose vendors based on risk mitigation rather than pure cost savings requirements. Monitoring processes and shortening the supply chain will boost S.C.'s Resilience (Disintermediation). A detailed evaluation of an institution's susceptibility to disturbances and the effect of a catastrophe on S.C. will enable risk transfer and reduction strategies to be developed [25].

2.4 Organization Culture (O.C.)

Organizational culture is a civilization that faces the challenges of external adaptation and internal integration [26]. It developed a set of universal assumptions and beliefs that have functioned well enough to be accepted as accurate and passed down from generation to generation. Institutions' corporate-culture impacts how it reacts to external developments and takes business decisions [27]. The organizational culture is divided into several values: (What is preferred and valuable to our sentiment) [28, 29], the other related to the stories that are known as written or spoken novels [30], the filters and whatever it is known as frameworks [31]. As this model, it includes all the previously mentioned

models known as tools: (that is, a set of values, stories, and frameworks that are practised within the organization) and the last model in the categories: (It is a set of concepts that define the difference between organizational goals, people and practices Within the organization) [32].

2.5 Organisational performance

In recent years, researchers and practitioners' interest in the supply chain's Performance increased, which underlined expense minimisation or enhancement [33, 34]. Modern SC plan contains a set of steps necessary for achieving superior S.C. and actual value, including employing the proper individuals, adopting adequate technology, external cooperation, internal cooperation, and administrating changes in S.C. [35]. Today, market competition is more concentrated among S.C.s than individual firms. As a result, effective supply chain management became an effective plan that guarantees a competitive advantage for the market [36]. So, for industry players, enhancing SCP became a top priority [37]. Moreover, SCM activities have a constructive and essential association with strategic advantages [4]. Therefore, several companies still use SCM as a strategic tool to increase Performance [16].

3. DYNAMIC CAPABILITY VIEW (DCV)

From a DCV perspective, organizations need to adjust their S.C. resources to deal with uncertain environments. DCV believes that organizations can employ their internal and external capabilities and develop new capabilities to cope with the ever-changing environment [28]. Market volatility is the main reason behind the environmental developments in the S.C. setting, volatile industry, consumer needs, and competitor tactics. Paradigm argues that dynamic capabilities allow chances to be viewed, formed, and captured, and so do dynamic capabilities that enable events to be perceived, developed, and seized [38]. They were maintaining competitivity by reorganizing group properties so that they could be extended to SCM [39]. Supply-chain-agility, Flexibility, and adjustment are essential considerations in this sense. It is challenging to replicate complex capabilities that produce S.C. and help businesses improve their efficiency [2].

Humanitarian supply chain organizations should seek supply chain agility (SCAG), which will allow humanitarian organizations (H.O.s) to assist casualties of natural disasters with the right humanitarian aid at the right moment [28], and S.C. Resilience, which will help to maintain the humanitarian supply chain.

There is a concern by some academics' concerning "resource-based view-RBV" and its consequences for the dynamic climate [2]. Dynamic skills view (DCV), according to researchers, describes an organization's strategic edge concerning evolving conditions. described dynamic capabilities as "the firm's capacity to incorporate, construct, and reconfigure internal and external competencies to adapt to rapidly evolving conditions", they also pointed out that dynamic-capabilities involve the ability to perceive and form chances, seize opportunities, in addition to maintaining competitiveness by promoting, merging, securing, as well as re-allocating company resources. In a humanitarian setting, dynamic capabilities are considered simple, experienced, and precarious operations. They depend on rapidly creating new insights so resources and capabilities can be combined, transformed or updated to capacities indispensable for unconfirmed environments. Based on the previous reasoning, SCAG and SCRES are considered "dynamic capabilities" of H.O.s. [40, 41].

4. HYPOTHESIS DEVELOPMENT

4.1 Supply chain flexibility and on non-government organisational performance

As a result of disaster unpredictability, flexibility is considered an essential feature of the organization. To respond quickly to the chaos that may occur after the disaster, stakeholders immediately established a supply chain network to alleviate individuals' suffering when they get affected by a disaster. "The speed of humanitarian assistance after a disaster depends on the ability of logistics personnel to purchase, transport and receive supplies at the humanitarian relief work site. [42]" According to the limited information available, the need for the phase of assessment and response is carried out. After that, as the situation changed, S.C. The structure needs to be adjusted based on the content and the amount of data derived from the site of the disaster.

Additionally, as events in the areas prone to disaster continue to evolve and people's problems have changed, humanitarian relief actors are facing a challenging situation. They need to upgrade a flexible S.C. design to handle these difficult situations. Agility and flexibility are reaction time and responsiveness measures [43]. Therefore, flexibility is considered a prerequisite for agility. Flexibility as an essential prerequisite has a positive impact on agility. Besides, agility, in addition to flexibility both positively affect the relief of an NGO's Performance. Therefore, we propose the following hypotheses:

Hypothesis-1: A positive correlation between Supply-chain flexibility and performance NGOs exists.

4.2 Supply chain agility and on non-government organisational performance

In respect of Agility, organizational Agility reflects the market's and organization's willingness to function together and the strength of association between them. Agility is an organization's capacity to react quickly to disasters in various fields. Real humanitarian relief supply chain management problems are primarily based on the catastrophe's nature, location, and size [44]. Earthquakes and hurricanes, for example, devastate a country's physical structures, causing numerous routing problems for emergency supplies. Similarly, a natural catastrophe will interrupt the warehouse management of humanitarian relief materials due to security concerns. A humanitarian supply chain has two categories of customers: those affected by disasters and those who contribute to support others affected by disasters [45]. People who donate to NGOs are the de facto driver behind the humanitarian supply chain, yet assessing the needs and desires of individuals affected by the disaster is the source of humanitarian supply chains [46, 47]. Despite the compatibility between the organizations' and donors' objectives, the institution that applies the concept of managing humanitarian supply chains in their work must be responsible in front of the donors [48, 49]. So, according to the previous claims, the following hypothesis has been proposed:

Hypothesis-2: A positive correlation between Supply-chain Agility and performance NGOs exists.

4.3 Supply chain resilience and on non-government organisational performance

Supply chain resilience is higher-order complex competency which may affect the humanitarian supply chain's success. Emotional skills are an organization's capacity to "see and exploit potential possibilities, and reconfigure and secure information properties, competencies, and complementary assets to maintain a sustainable competitive advantage [48]." So, the dynamic capabilities view (DCV) means that the enterprise has the potential to adjust its specific and co-specialized services in reaction to shifts in external environmental conditions. For example, when humanitarian agencies involve their relief staff in identifying "disaster-affected victims" needs and interpreting those needs so they are successfully conveyed in HSC, dynamic capacities in HSC arise [37]. Recently, academics in logistics and SCM expanded the DCV outside enterprise limits in a way that considers complex S.C. capacities such as supply chain agility [40, 43] and S.C. durability [49]. Dynamic sensing, stability, and speed are attractive SCAG properties [50, 51]. These experiments have discovered beneficial associations between the efficiency of the supply chain and SCAG [52, 46]. According to this argument, the following hypothesis will be tested:

Hypothesis-3: A positive correlation between supply chain resilience and NGO's Performance is exist.

4.4 Moderating effects of organizational culture

Al-jawazneh [53] stated that most organizations have operating rules, viewpoints, and legislation. An organization's culture is always shaped by its tradition, purpose, framework, and leadership [54]. Good organizations recognize that implementing management strategies compatible with their community increases efficiency [23]. Previous research has widely agreed that a corporate culture is a tool for strategic planning e.g., [27, 53]. O.C., for example, has been shown to have a significant role in driving S.C. policies according to previous research.

Therefore, Tamilmani [11] discovered a relationship between organizational culture and S.C. integration activities. There could be cultural differences between office and field personnel inside a humanitarian organization. As a result, O.C. may have a direct impact on NGOs performance. However, the effect can vary in disasters. As a result, the course of control and flexibility is believed to affect how (SCAG) and (SCRES) affect humanitarian supply chain operations disasters. Efficiency and organizational hierarchy are at the heart of control orientation. A disaster prevention and preparedness division in a humanitarian agency is typically responsible for forecasting, storing, and finding material [54]. Hence, we can hypothesize:

Hypothesis-4. a, b, c Organizational Culture has a positive moderating effect on the relationship between (a) Supply Chain Flexibility and Performance NGOs, (b) Supply Chain Agility and performance NGOs, and (c) Supply Chain Resilience and Supply Chain performance NGOs.

5. THEORETICAL FRAMEWORK

The proposed theoretical framework for this study is illustrated in Figure 1. It focuses on the impact of the Humanitarian Supply Chain on Non-Government organisational Performance. Where the theoretical framework of the study consists of three independent variables, which are Supply Chain Flexibility, Supply Chain Agility, and Supply Chain Resilience and as a mediator variable, organizational culture and the dependent variable is organisational performance.

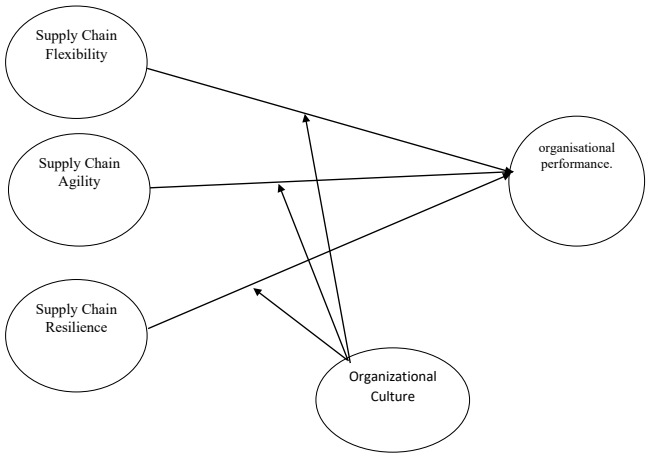

Figure 1. The proposed theoretical framework [2, 5]

6. METHODOLOGY

The data for this study were collected using a questionnaire, which is a quantitative research method. The research was conducted in previous studies to determine the factors of the current study. These factors were determined by Supply Chain Flexibility, Supply Chain Agility and Supply Chain Resilience. They were referred to in our present study as independent variables; the Moderating Effects of Organizational Culture and the dependent variable, NGOs performance Questionnaire questions, were built on previous studies where supply chain flexibility was adapted from [50]. Moreover, supply chain agility is adapted from [40, 52], and supply chain resilience [41], moderating effects of organizational culture adapted from [27], performance [2]. The study community consists of associations and non-profit organizations operating in Jordan, numbered 1640, based on the register of [55], a website affiliated with the Jordanian Ministry of Social Development that specializes in the affairs of associations and non-profit organizations.

The study sample amounted to 311 [56], where researchers distributed 311 questionnaires to those organisations' CEO/ COO and supply chain managers. As a result, 311 were distributed, and 308 were retrieved.

7. DATA ANALYSIS

We utilized the SmartPLS 3.3.2 version of partial least squares (PLS) modelling. To evaluate the study's premise, the researchers used a two-stage technique [57, 58]. The first step is the measurement model, which includes convergent and discriminant validity [59]. Then, it will move on to testing hypotheses and making a structural model after the truth of their claims has been proven. For starters, convergent validity examines whether an item measures the latent variable it promises to [60].

The assessment of the measuring model entails the analysis

of the link between each construct and its items. The reflective measurement model investigation includes the evaluation of indicator loading," indicator reliability, consistent internal reliability, con-vergence validity", and discriminant validity. The conventional rule of thumb for indicator loading is 0.708 or more significant [60]. It is common to identify weaker item loading and delete items with low loading in social science research [61]. Furthermore, it is permissible to consider eliminating items with an outer loading of between “0.4 and 0.7” if doing so improves the value of composite reliability and the average variance extracted (AVE) [60]. Table 1 shows a summary of the factor loadings. The number of subjects in each column indicates the number of questions

The number of subjects in each column indicates the number of questions Where at the beginning of the first purposes table, which is the performance, consists of 9 questions starting from PERF1 TO PERF9, followed by flexibility, the number of questions is 5 Starting from FLX1 to FLX5, and the organizational culture questions consist of 5 Starting from OC1 to OC5 questions.

Table 1. A summary of the “factor loadings”

Constructs	Items	Factor loadings	Cronbach's Alpha	C.R.	(AVE)
Performance	PERF-1	0.813	0.915	0.93	0.597
	PERF-2	0.792			
	PERF-3	0.822			
	PERF-4	0.851			
	PERF-5	0.788			
	PERF-6	0.747			
	PERF-7	0.651			
	PERF-8	0.715			
	PERF-9	0.755			
Flexibility	FLX-1	0.841	0.899	0.925	0.712
	FLX-2	0.833			
	FLX-3	0.869			
	FLX-4	0.834			
	FLX-5	0.842			
Agility	AGI-1	0.575	0.849	0.881	0.483
	AGI-2	0.789			
	AGI-3	0.651			
	AGI-4	0.731			
	AGI-5	0.649			
	AGI-6	0.707			
	AGI-7	0.776			
	AGI-8	0.655			
Resilience	REC-1	0.830	0.747	0.832	0.558
	REC-2	0.840			
	REC-3	0.692			
	REC-4	0.598			
Organization Culture	OC-1	0.711	0.819	0.873	0.579
	OC-2	0.816			
	OC-3	0.809			
	OC-4	0.761			
	OC-5	0.700			

8. STRUCTURAL MODEL

Two methods of measuring validity exist discriminant and cross-validation. The HTMT was examined to ensure that it had discriminant validity. Initially proposed by [60], the proposal was authorized and updated by [61]. 0.90 is the maximum acceptable HTMT value.

Table 2 displays the HTMT results, and it is evident that they all fall within the permissible range of values. Consequently, each structure is distinct from the others. Using the measurement model, it was determined that the constructs were reliable and valid.

After developing the measurement model for reliability and validity, the structural model is tested. Analysing structural models entails evaluating how effectively the theory or ideas are empirically supported by the facts and, as a result, deciding whether the hypothesis is empirically proven an assessment of construct discriminant validity was carried out by checking the Fornell-Larcker criterion this is what Table 3 shows.

Table 2. HTMT

	Agility	Flexibility	Organization culture	Resilience
Agility				
Flexibility	0.732			
Organization culture	0.687	0.533		
Resilience	0.614	0.44	0.606	
performance	0.673	0.755	0.569	0.575

Table 3. Fronell-Larcker

	Agility	Flexibility	Organization culture	Reclines	performance
Agility	0.695				
Flexibility	0.692	0.844			
Organization culture	0.576	0.462	0.761		
Resilience	0.495	0.371	0.526	0.747	
Performance	0.635	0.693	0.511	0.518	0.773

Table 4. Demographic information of respondents

Characteristic	Frequency	Percentage
Gender		
Male	223	72.40%
Female	85	27.60%
Age		
less than 27	29	9.42%
27-less than 35	51	16.56%
35-less than 45	136	44.16%
45 and above	92	29.87%
Education		
Diploma	38	12.34%
Undergraduate degree	182	59.09%
Postgraduate degree (Master/PhD)	88	28.57%
Experience		
less than 10	35	11.36%
10-less than 15	57	18.51%
15-less than 20	104	33.77%
20-less than 25	74	24.03%
25 and above	38	12.34%
Specialization		
Business Administration	165	53.57%
Accounting	67	21.75%
Social sciences	58	18.83%
Other	18	5.84%

Table 4 shows the demographic profile of the respondents, as well as the frequency and percentage of respondents belonging to each category. Around 72.40% of those polled were men, while 27.60% were women. This suggests that the proportion of male employees in this industry is somewhat higher. In terms of educational attainment, the data show that the majority of respondents (28.57%) had Master's degrees, followed by bachelor's degree holders (59.09%) and certificate holders (12.34%). These data imply that NGOs' hiring practices often favour individuals with a bachelor's degree or above. They also prefer more education because they feel that knowledge is more significant.

Finally, according to work experience, results indicate that most respondents have more than ten years of work experience (33.77%). This suggests that organizations focus on experts in this sector, and this means that these organizations have a high rate of employee retention and focus on expertise.

9. HYPOTHESES TESTING

The PLS Algorithm function was used to examine the path coefficient in the structural model. The SmartPLS 3.0 model's path coefficient for regression analysis is equivalent to the usual beta weight. From -1 to +1, the estimated path coefficients vary from strongly positive to strongly negative associations. In contrast, a path coefficient near zero implies that there's no relationship at all. Figure 2 the model explains the path coefficient, it is shown in Table 5 that the path coefficient, standard error, T-Value, P-Value and significance level of the analysis were all tested for statistical significance.

The results of R2 are reported in Table 6 to determine the accuracy of the predictions. For example, the R2 values of Performance are 0.628. These results verify that explanatory variables explain more than 62% of variances.

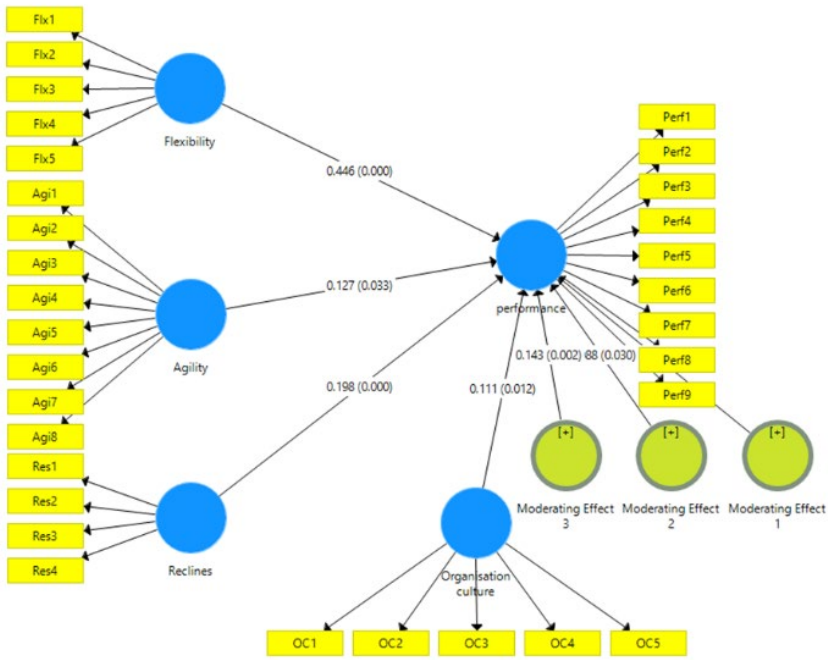

Figure 2. Testing of hypotheses

Table 5. Hypotheses testing estimates (path coefficients)

Hypo	Relationships	Std. Beta	Std. Error	T-Value	P-Values	Decision
H1	Flexibility -> performance	0.446	0.051	8.723	0.000	Supported
H2	Agility -> performance	0.127	0.060	2.137	0.033	Supported
H3	Resilience -> performance	0.198	0.053	3.746	0.000	Supported
H4	Organization culture -> Performance	0.111	0.044	2.507	0.012	Supported
H5	Agility ->Organization culture -> performance	0.142	0.050	2.843	0.005	Supported
H6	Flexibility->Organization culture -> performance	-0.088	0.040	2.179	0.030	Supported
H7	Resilience ->Organization culture-> performance	0.143	0.045	3.175	0.002	Supported

Table 6. R^2 and R2 adjusted

Variable	R^2	R^2 Adjusted
Performance	0.628	0.619

10. DISCUSSION AND CONCLUSION

This study examines the relationship between the Humanitarian Supply Chain and non-governmental organizations (NGOs) performance. It is evident from previous research that the Moderator Organisation Culture plays a significant role in promoting Supply Chain Agility and Supply Chain Resilience [62], which is reflected in the Performance of NGOs. The research outcomes may provide practitioners involved in disaster relief operations with some intriguing recommendations. Our findings contribute to a deeper comprehension of Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility and their implications on Performance [63]. Content that Organization Culture enhances the dynamic sensing capability, a crucial aspect of Supply Chain Agility. The Organisation Culture facilitates the development of proactive capacities, such as redundancy, reserve capacity, Resilience, integration, and productivity. In contrast, during the catastrophe phase, the organization's flexible orientation helps to prioritize its reactive skills, such as speed and recovery. The post-disaster phase focuses on healing, rehabilitation, and rebuilding, often expanding on pre-disaster planning work [2].

Jordan is considered one of the third world countries and surrounded by countries that witness many conflicts and civil wars, for example the Syrian civil war, the Palestinian-Israeli conflict and many other problems, which highlights the importance of non-governmental organizations, and it is worth noting that there are a few studies that shed light on the work of organizations non-governmental organizations in the Middle East Effective teamwork is often seen as the key to success at this level. Consequently, openness and accountability are essential for any business and its connection with its stakeholders. Therefore, based on the findings, we may claim that an organization with a flexible orientation can benefit from the combined impacts of Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility. Thirdly, based on the data, we can assert that focusing on developing Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility capabilities may improve Performance (explanatory power of 61%). In the disaster period, however, Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility explain just 21% of the NGOs performance. Thus, companies can establish suitable solutions for the various stages of a crisis. Despite several research on Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility in the context of HSC, there are few robust empirical tests. In addition, even though some scholars have conceptually discriminated between Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility, there is no rigorous theory-driven empirical examination of their unique performance impacts in the context of NGOs. Lastly, the hypothesis regarding the impacts of Supply Chain Agility, Supply Chain Resilience, and Supply Chain Flexibility on HSC remains fragmented and lacks a solid theoretical foundation. Lastly, our work will serve as a foundation for future research. It is worth noting that there are several challenges and obstacles that faced the current research, and among these obstacles is the difficulty of reaching and communicating with the organizations, and this is due to the different organizational culture of each organization. The idea is that some organizations' managers have an educational background from literary disciplines, and this is considered an obstacle to reaching an ideal supply chain. It has been noticed that some organizations apply the concept of supply chains in their work, but without assigning a job title to them.

Despite all this, the researchers made contact with the non-governmental organizations targeted by the research The researchers suggest the need to allocate an independent department for the supply chain in non-governmental organizations, and they must be specialists, and the role of transparency in the work of these organizations must be enhanced by adopting modern technology systems such as artificial intelligence and integrating and applying it in the humanitarian supply chain because of its great impact on improving The performance of organizations, and one of the suggestions that must be taken into account is to work on reformulating the performance measure in those organizations, as most of the organizations that were studied were facing many challenges in understanding and defining a standard measure for measuring their performance, and the researchers suggest that the concept of (performance drive) should be adopted.

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