

Organizational and Managerial Barriers in Humanitarian Organisations in Jordan

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Abstract - Information sharing is the act of exchanging data between numerous humanitarian organizations, individuals and technologies in order to ascertain that the context of supply chain management is achieved. Information sharing within humanitarian supply chain organizations is paramount as it ascertains that strategic planning and decision making brings forth a timely and better response to affected humanitarian individuals. The process of information sharing within the humanitarian organizations is encouraged because it leads to an increase in performance at a reduced cost across the supply chain. The current study focuses on information sharing barriers in the humanitarian supply chain in Jordan. To gain an understanding on information sharing within the humanitarian supply chain organization (HSCO), use of case studies that incorporated interviews brought out what was needed. The methodology used the induction approach in the research design because focused on human aspects, understanding the research context, gathering qualitative data and flexibility to change the structure of the research during the research stages. The population of the study were humanitarian organizations in Jordan. Sampling consisted of searching from different websites, forums, and the ministry of planning and International Corporation. The analysis and result part indicated that the interviews conducted from the case studies were similar in result. The result was similar because the barriers identified were similar. For instance, the notable barriers were lack of trust, security of information and skills and capacity building. The paper summed up that barriers like lack of trust and lack of knowledge within organizational structure are likely to affect the effectiveness of information sharing in humanitarian organizations in Jordan.

Keywords – Barriers, Humanitarian organizations, Management, Jordan

1. Introduction

According to Ref [1], supply chain information sharing is an activity that facilitates interaction between partners on aspects regarding demand, shipping, inventory and cash flow with the aim of optimizing inventory, quick response, and reducing

the total cost for gaining increased core competitiveness. The notable types of information sharing tools that the humanitarian organizations can use are email, instant messaging and shared workspaces. Supply chain management recognizes operational process that communicates with suppliers by making certain that the needed material and information are accessible throughout. Ref [2] suggests that supply chain refers to operational management process that influences the communication of the organization with clients.

The use of operational process in humanitarian organization is paramount as it ascertains that the necessary and needed materials are provided to the organization is needed. Within the Humanitarian perspective, it is right to assume that supply chain makes certain that the needed material and services are offered to the affected populations during disasters [3]. Supply chain management within the humanitarian organization is encouraged because of its nature to influence the decision-making process attached to supply via the development of strategic, tactical and operational decisions [4].

Information sharing on its part is required within the humanitarian organizations for the purpose of influencing unit valuation that in most cases improves the determination of whether the supplies have met the needs of beneficiaries. The feedback offered through information sharing remains significant to the humanitarian supply chain management as it makes certain that the engagement of donors with humanitarian organizations and responsive to the unmet needs is achieved [5]. Information sharing also indorses an improved level of efficiency in supply chain management [6], and increased administrative productivity as well as enhanced consumer amenities [7]. Moreover, information sharing leads to structuring and establishing of bonds between numerous participants [8]. Early badly-behaved discovery by

the organizational administration, quick reply time both the consumers and the workforces, reduced time from the order of delivery in the supply chain and warranties better merchandise outlining and tracing within the supply chain [3]. Furthermore, Information sharing is encouraged within the humanitarian organizations because it supports open deliberations since members can have forums online and deliberate on areas to be enhanced thus humanizing on the organization's morals.

The barriers that face information sharing between humanitarian organizations at horizontal level include privacy of the information shared [9], the dependability of the cost of the data being shared at a specific time [3] and incentive challenges concerning that precise process or rather the technique of information sharing [6]. There is also the barrier of consistency and the cost of the information expertise in place [9]. In addition, the other notable barriers are the emerging issues of the anti-trust regulations [6], the timeliness and accuracy of the information. The current study will focus on information sharing barriers in the humanitarian supply chain in Jordan. The article highlights objectives, research aim, literature review, methodology, research and analysis. The paper further illustrates on the discussion part, and finally a conclusion that sums up the contents of the article.

1.1 Study Aim and Objectives

This article aims at investigating on information sharing barriers of supply chain management within humanitarian organizations in Jordan. The research objectives are meant to: -

1. To discover Supply Chain Management challenges in humanitarian organizations in Jordan.
2. To comprehend what Humanitarian organizations are and what they are used for in Jordan.
3. To identify the information sharing barriers in humanitarian organisations in Jordan.

2. Literature Review

Information sharing barriers in business organization is the lack of information quality due to inaccuracy, timelessness and irrelevancy plus inaccessibility, lack of credibility and unavailability

of the information. Without reliability or validity, information has no value to the receiving partner [10]. The other barrier in business organizations in connection to sharing of information is the cost and complexity of implementing advanced systems since not all SC members are connected and have the capability to exchange data from advanced systems. However, using advanced systems can be negatively perceived because of high capital investments and lack of cost-sharing agreements. There is also the risk that only one partner harvests the benefits created by increased IS [8].

The approach of handling of confidential information and lack of trust are also barriers to an effective information sharing system within business [11]. SC members are often unwilling to share information to avoid opportunistic behaviour and prevent leakage to competitors. This issue can have a negative effect on organizations' commitment to relationships and their willingness to share information with other SC partners for fear of being misused. Another issue is power asymmetry between SC partners, which can result in resistance to sharing information [11].

Information sharing aims to get hold of efficiency in the whole supply chain [12]. It provides tools for coordination and integration of the processes or activities along the supply chain to ensure that customer needs are fulfilled. Many researchers concluded that information sharing leads to improved performance in supply chains either direct or mediating [13]. Other sources indicate that information sharing, joint relationship effort, and dedicated investments lead to trust and commitment. Trust and commitment, in turn, lead to enhanced satisfaction and performance [14].

Information sharing with the supplier can considerably affect supply chain performance and reduce costs. There is a positive relationship between IS and SC operation: higher level of information sharing is connected with lower total cost and shorter order cycle time [15]. Song & Yao [16] demonstrated that the highest organizations profit will be achieved by combining both IS and coordination. IS helps supply chain members to build and reinforce relationships and social ties among them to ensure increased skills and willingness to connect and share information with other members, and momentous reduction of reservations [16].

Information sharing leads to improved supply chain management productivity [6]; organizational efficiency and improved customer services [7]; and optimized capacity for resources and competencies exploitation [15]. According to Lee et al. [17], the shared information creates and strengthens associations and social ties among the information receivers and givers. Supply chain members with more skills and enthusiasm to share information among themselves may ominously lessen suspicions [18]. Also, IS ensures availability of more information among SC partners to certify upgraded prominence, alter existing plans or articulate future operations, including precise predictions and quick customers response based on real demand [19]. Information sharing expands information quality and information processing skills of all supply chain partners which simplifies vagueness management around the partnerships and the external atmosphere [20]. Companies must comprehend what type of information to be shared with other partners, which members are dire to the success of the organization and the supply chain, how far and when the information should be shared. This is significant since it makes sure that the supply chain partners enforce actions to address any barrier to information sharing, including risky traits like unscrupulousness to ensure fair and even-handed profit sharing.

3. Methodology

The study presents information pertaining to research methodology adopted in the study to collect data on information sharing barriers among humanitarian organizations. The parts to be discussed in the study are the research design, target population, data collection tools and data analysis techniques.

3.1 Research design

The research utilized to fully comprehend the nature of Humanitarian Supply Chain Management is the induction approach. Induction was utilized as the primary approach because it focuses on human aspects, understanding the research context, gathering qualitative data and flexibility to change the structure of the research during the research stages [21]. The approach is paramount as it permits the researcher to start formulating context specific objectives to guide data collection on general ideas from research subjects and literature. The approach further provides better understanding about

information sharing barriers in HSCM and makes inference and conclusions from the study findings.

3.2 Population

The population of the study are humanitarian organizations in Jordan. On the other hand, the primary data collection was done through case studies that consisted of interview questions. The case studies were attained from eight humanitarian organizations in Jordan and were made up of UN-NGOs, the international and national humanitarian organizations in Jordan. The humanitarian organizations were considered because they are engaged in offering relief supplies, food, shelter, water and sanitation to Syria refugees.

3.3 Sampling

On matters related sampling, the approach was performed by searching from dissimilar websites, forums, and the ministry of planning and International Corporation. Thus, secondary data on its part consisted of books and articles from genuine and known authors for the relevance of knowing the barriers of information sharing within humanitarian organizations. In addition, inclusion of directors and executives involved in coordination and information sharing of supply chain management in non-governmental organizations was also put into perspective.

4. Results

The researcher was able to categorize themes in the dataset related to the research aim and objectives, and therefore investigation and clarification of the findings on information sharing barriers of humanitarian supply chain. The design was based on expert interviews as well as multiple-cases study starting with development of the tools, examination of the cases and validation of the findings. The holistic research design allowed the researcher to achieve valid, reliable as well as greater accuracy in the research findings and meaningful conclusions [22]. Studies have indicated that qualitative HSCM studies are limited within the academic work [22]. Similarly, more recent reports suggest that there is a dearth of empirical data collection on HSCM through case studies of qualitative methodologies [23, 24].

This study put into practice qualitative methodology to achieve the aim and objectives for this research.

Qualitative Research is concerned with making knowledge claims mainly based on constructivist perspectives such as meanings constructed socially and historically, multiple meanings of human experiences and intent to develop a theory or pattern [25]. The qualitative study that incorporates use of case studies is appropriate for theory building [22]. This study will employ qualitative methods to collect and analyze data in order offer insight on theoretical factors restraining information sharing in the context of HSCM.

This study used primary and secondary data collection sources consistent with the view that a research study entails various data collection techniques such as interviews, reports, archive records and websites were used [26]. Case study methodology has been used to collect the data in the field of study. According to Ref [27], case studies are rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources. As discussed earlier, this research seeks to identify and understand the barriers of IS within the field of HSCM that social interaction may have, hence the interpretive view of inductive approach working with what Ref [26] describe as the social actors within the field was adopted.

While analysing about UN-Organizations, in case study one, the interviewees clarified that numerous humanitarian actors lacked knowledge and experience about Humanitarian Supply Chain Management. The interview conducted from case study one also showed that Humanitarian organizations in Jordan lacked coordination between organizations. Case study one through the interview conducted further showed that the notable barriers are skills and capacity building, lack of trust. When it came to organizational barriers, the interviewees suggested that some of the barriers in humanitarian organizations in connection to information sharing are competitiveness between firms, insufficient resources for sharing information, power, availability and accessibility and security information. Case study two in its part identified lack of skills and capacity building, employee retention, lack of trust, lack of motivation to use information as barriers that hinder the success of information sharing within humanitarian firms.

Interviews performed in case study two on organizational barriers indicated that lack of harmonized structures to help facilitate information

sharing coordination hinders the success of humanitarian organizations. The case also sensitized on competitiveness between organizations, insufficient information sharing resources and commitment of members.

Case study three demonstrated that employee motivation is a problem to information sharing among organizations that do not offer satisfactory financial incentives to their staff within the managerial department. The interviewees also mentioned lack of relevant personnel as a barrier to information sharing because of limiting humanitarian firms in attaining their services. Lack of trust where suppliers evade from telling the truth when a problem arises, thus leading to a challenge even to experienced workforce due to lack of information sharing. The barrier is based on the following:

“...we have problem about coordination with other organization as I mentioned before That providing the same service because as I mentioned some of those organizations, they are trying to hide the information from different organization maybe for their own benefit or for maybe mistake happen with them before” Coordination officer

On organization barriers, the case study identified competitiveness between firms, insufficient information sharing, security information, accessibility and availability and power. The challenges were based on the following quotes:

Power: *“But I think that there are no written policies, but it is left to us, implementers of the program. It’s up to us to judge what is danger and what competition is or what not. So far, I was not in a position where I had to think twice as to whether I should share some information”*. Program manager

Accessibility: *“We don’t share the documents that are related to personal files of our students. Those kinds of information are kept under key, and so is information about their background and family status and any other personal information we don’t share things”*. Coordination officer

Security of information: *“...there is this other program which is working with health in South Syria. We are managing it from here but it operates in South Syria, and there we have to have valuable profile that you are providing aid, it should not be official, you cannot publish your information not,*

because its confidential but for the issues of security.” Program manager

Insufficient information sharing: “... *It’s very few coordination actually because as you know each organization trying to do the best for its own organization with their limited resources sometimes, they are trying to hide information...*”. Program manager

Competitiveness between organizations: “...*there is always this challenge of how can I put it, being jealous and protective over information that you have. It happens all over the world you know, you have organizations that are dependent on donors funding and limited funding and then you have to think about your future. So, sometimes you are hesitant to share the information which you have because maybe your partner turns into your competitor you know.*” Coordination officer

Case study four portrayed that the major managerial barriers are staff experience and skills and capacity building. The barrier of skills and capacity building is supported by the following quote: “*Training is at the same situation, and latest software again is a challenge and the HR system because these are not funded by the donors so we have to build in our own ... Our staff are capable but they need to be trained they need to be updated and they need have their capacity build all the time but this is again another gape*”. Project manager

The barrier of staff experience is supported by the following quote: “*I guess experience help so on so, you know, if you have the--a new clubs that have been coming in and they give them responsibility they don’t always know how long these questions of; what can be share or shouldn’t be shared, what’s personal information and what should be kept secure, what should we be very willing to share because it helps the community. So that can become with experience and, yeah, there’s old labours kind of groups, kind of works...*” Project manager

While talking about organizational barriers, case study four names barriers like competitiveness between organizations, insufficient resources for information sharing and availability and accessibility. In case study five, the interview talked about one major barrier in managerial department, i.e. skills and capacity building. The barrier was based on the following quote: “*Of course they need a lot of training for each department based on*

request actually also for example I need training for analysing data because I don’t how to do that actually before I took this training...” Program manager

While asked on organizational barriers, the participants named the following barriers: power, accessibility and availability, employee motivation, structure of the organization, and competitiveness between organizations. The case studies portray those barriers facing firms within the organizational department seem to be similar in the circumstance that a compare and comparison perspective is undertaken. Case study six on its part lists managerial barriers within humanitarian organizations as lack of trust and lack of donor confidence. The quotes that clarify are as follows:

Lack of trust: “*I will tell you something, I trust you as a person, but you present a side of the NGO. Okay, I trust you because of some kind of trust thing. But if you leave, and this is rare, there are deliberations, there is something called confidence building measures.*” Program manager

Lack of donor confidence: “...*sometimes a new organization or a new donor doesn’t like understand our nature of work for example this one sometimes it happens okay So, we tell them like our guide lines our nature of work and how we sometimes and we meet sometimes to know like those...*”. Program manager

While interviewing about organizational barriers, the case study participants named the structure of the organization, competitiveness between organizations, insufficient information sharing and power, staff motivation and accessibility and availability. The quotes identified in the case seem to be similar to those made in the other case studies while discussing about organizational barriers.

Case study seven portrayed that humanitarian organizations lacked the right capacity to match the changing technologies to facilitate information sharing within the managerial sector. He quote below clarifies: “*Of course building in the human resources it needs building all the time we believe that have in the HR in my NGO we have a unit for training for the internal training the capacity building of internal staff with the assessment they did the assessment buy we need to enhance capacity building ...*”. Coordination officer

On matters related to organizational barriers, the participants named the following barriers: power, structure of the organization, accessibility and availability, and competitiveness between organizations. The list of barriers provided within case study seven seem to be similar with the other case studies especially where organizational barriers are concerned.

Case study eight was significant because it listed major managerial barriers affecting humanitarian organizations like skills and capacity building and employee recruitment. Employee recruitment as a barrier is based on the quote below: *“The challenges in implementations would lately recruitments process because when you have a program there too technical it takes time for us to recruit and train the candidate appropriately and so that they would enter the , enter and work appropriately within the umbrella and maintain this takes an effort from the employees in the field themselves and effort from us as program department... when you have a new recruited personal it takes time for this person to start practicing and delivering the appropriate service to maximum, number needed of the benefiter...”* Program manager

5. Discussion

Many humanitarian organizations have been working throughout Jordan to provide humanitarian assistance to the Syrian refugees to protect their lives, and dignity [28]. Although the main humanitarian focus is the Syrian refugee crisis, they also support other refugees in Jordan, and implement early recovery and developmental programs as well. In order to comprehend the barriers of information sharing within organizational and managerial departments in Humanitarian Supply Chain, the use of interviews among experts was undertaken. Through the case studies, organizational and managerial barriers came in top three, i.e. first and third respectively. From the interview, it was noted that the main objective of the humanitarian organizations is to offer humanitarian aid operations to susceptible individuals while averting loss of life, property and material destruction through instant reaction to the predicament. SCM play a crucial role to the effectiveness and speed of response for major humanitarian programmers, especially where the organizational and managerial departments are needed in fulfilling information sharing. SCM is critical to disaster relief operations due to the effectiveness, efficiency and speed in supplying the

affected people with their requirements such as health, food, shelter, water and sanitation [29]. Unfortunately, the process of helping victims of humanitarian relief is not often as smooth as it might seem, especially where information sharing in supply chain management is concerned. Some of the notable challenges in information sharing in humanitarian organizations like refugee camps in Jordan in managerial and organizational are as follows: lack of right technology/tools, need for capacity/skills, delayed communication, limited information, irrational decision making, irrelevant information late recruitment and engagement of staff, limited funding and lack of capacity building [28]. The case studies study, which included use of interviews portrayed that organization among the Supply Chain partners is limited which eventually delay operative service delivery. The information system is lacking, out-dated or not well fortified to simplify Information Sharing. The human resource workforce is either lacking, inadequate or lack relevant skills, especially in Information Technology and project management skills due to high turnover or poor remuneration, which affect the quality of service, information processing and sharing as well. The aforementioned challenges are what make the organizational and managerial departments in the humanitarian supply chain management ineffective especially within the refugee camps in Jordan.

Humanitarian Supply Chain coordination within the organizational and managerial organization coordination can be affected because of numerous diversity actors, expectations from donors and funding [30]. The humanitarian relief chains can be affected because of a shared vision and mission numerous humanitarian firms in connection to assisting others as firms often end up clashing culturally, geographically, politically and linguistically. The instigation here is coordination within the organizational and managerial department of humanitarian firms is usually faced with challenges that often evade the success of the organizations. The case studies show that information sharing within the supply chain management helps in delivering service to the vulnerable population. Unfortunately, the presence of a less developed supply chain characterized with numerous challenges like the absence of the right technology, need for skills and delayed interactions makes it difficult for humanitarian firms like refugee

camps to fulfil the contents of information sharing effectively [31].

Where case studies are concerned, the study put into practice the qualitative research design with individual semi-structured interviews to collect data from the research participants [32]. Data analysis on its part entailed use of the thematic analysis. The case study participants were majorly logistic administrators, coordination officers, program managers and field officers [32]. The barriers to information sharing in humanitarian supply chain organizations are apparently brought about because of lack of know-how and experience. The case studies portrayed that skills and capacity building is one of the barrier that affects the success of humanitarian firms from fully implementing the aspect of information sharing. The problem comes about because of lack of significant skill-set like data entry. An illustration of what the case studies, articles books on humanitarian supply chain organization barriers to information sharing as follows:

Because of structural and managerial practices, Ref [33] entails that information sharing barriers in the humanitarian supply chain organization arise because of resistance to the proposed changes. Furthermore, the delay in addressing such challenges in most cases leads to failure. The other barriers that affect the effectiveness of information sharing in humanitarian supply chain organization are factors that are deeply embedded in institutional and professional realities, especially where inter-organizational information sharing is concerned [34]. Where employees are required to ask for permission for everything in a humanitarian supply chain organization, information sharing barrier also arises because of lack of trust.

Regulations that are strict and do not consider the rights of employees often hinder the success of sharing information in the humanitarian supply chain organization. In addition, less formalized organizational structure and voluntary information sharing arrangement can also lead to flexible and open communication among workers [35]. Communication also affects the structure of the humanitarian supply chain organization in instances where sharing of information on how products like food and medical services are required. For instance, when communication is blurred, the parties involved will not implement what is required effectively within a refugee camp.

A humanitarian supply chain organizational structure that lacks clear hierarchy arrangement among administrators and supervisors can lead to a poor approach of sharing information, especially where the supply relied food and medication is needed. Some managers within the humanitarian supply chain organization tend to take up authoritative roles that are not aligned to their work. The outcome of the event is employees within the humanitarian camp get confused, and lead to poor implementation and coexistence in the supply of both services and information. Departmental loyalty in the structure of the humanitarian supply chain organization affects information sharing in supply chain management at the horizontal level of coordination [36]. An instance is where logistics is at odds with manufacturing in connection to crafting fast enough to meet shipping deadlines. There may also be some instances where departments within the humanitarian supply chain organization tend to become competitive and feel that their work is more significant to the success of the humanitarian organization than that of others. The outcome of the aforementioned type of example is it leads to breaks in interaction that would ultimately affect the success of information sharing in the humanitarian supply chain organization.

Insufficient information sharing also affects the organizational structure of the humanitarian supply chain organization when coordination is involved in sharing of information and commodities like medication, clothing and food for the refugees. In circumstances that the information shared is not fully elaborated, the parties concerned will not be able to fulfil what is needed effectively within the humanitarian supply chain organization [35]. Individuals who are working in a humanitarian supply chain organization and lack an understanding of how to use the email to share the needed information, then the coordination in humanitarian supply chain will fail on their part of sharing information.

Security of information is also a contributor of poor organizational structure on matters associated with coordination in the humanitarian supply chain organizations. The issue of security comes about because of the effects that lead to delay in sharing of information by the humanitarian supply chain management team [36]. An instance is where the administration requests for personal information in the form of documentation, but ends up being

hacked. In the circumstance that a third party gets hold of the confidential information, there is likely to be negative results. Some of the notable results can entail being blackmailed, which would lure one to be affected morally and thus affect the effectiveness of sharing information within the humanitarian supply chain organization.

Managerial barriers like skills and capacity building is one of the barriers that hinder the success of information sharing within the humanitarian supply chain organization. The absence of enough data management skills associated with data entry and management in humanitarian supply chain firms often leads to unreliability when it comes to sharing of information. The outcome often entails misunderstandings in the humanitarian supply chain organization. Khurana, Mishra and Singh [36], shows that the problem of sharing information in the humanitarian supply chain management becomes worse where hiring of an expert is involved. The cost used to hire such an expert is in most cases is more expensive when compared to employees working with the humanitarian supply chain firm.

The absence of trust within the managerial team can also contribute to poor ways of sharing information by the humanitarian supply chain organization. When some members in the humanitarian supply chain firm take the advantage of others and fail to participate fully in delivering information, food and medical service to the refugee, then the barrier arise [31]. The absence of trust within the humanitarian supply chain organization is brought out by managers failing to trust their employees because they feel that sharing with the team confidential information is a wrong approach. The manager's fail to trust all employees because they are not sure with how the information shared will be used, and as a result, sharing of information within the humanitarian supply chain department becomes difficult.

Lack of staff experience is another barrier in managerial as it leads to inappropriate means of sharing information within the humanitarian organizations especially where food relief, food and clothing is concerned. The lack of experience is also where employees do not comprehend how the humanitarian supply chain firm runs because of either being new or refused to take part in the induction process. According to [37], sharing of information in the humanitarian supply chain organization is not an easy task because employees

are required to be experienced in order to ascertain that the approach of sharing the information and other refugee needs correlates with the expected outcome [31].

One of the challenging issues is the poor performance of humanitarian logistics related with disaster risk management [38]. Humanitarian relief organization managers should strongly emphasize allowing volunteer training assignments [39]. The agility of supply chain management can be increased by the multinational organizations, which will allow them to address and resolve supply chain disruptions [40].

6. Conclusion

The article shows that information sharing is the free flow and give-and-take data between organizational members. Organizations should not only aim to achieve efficient supply chain but also modest to increase enactment. In addition, information sharing among the members or partners provides one of the approaches to achieving increased performance. The research employed qualitative research design to ensure robust and all-inclusive framework for qualitative data coding. Moreover, this study provides evidence-based information for humanitarian organizations in Jordan to develop better strategies for enhanced information sharing so as to accomplish usefulness and improved performance among the humanitarian organizations. In general, the study improves research factor, internal as well as external validity, and the complete research consistency.

Organizational barrier is associated with barriers like structure of the organization, insufficient resources for sharing information and accessibility and availability of sharing private information. From a simple understanding perspective, the eight case studies all showed that humanitarian organizations in Jordan tend to experience similar barriers within the organizational and managerial department where information sharing is involved.

The presence of inexperienced employees contributes towards the failure of the humanitarian supply chain firm because they delay or deliver poor service and information to the departments and those in need of the help. The case studies, books, and articles used in this article provide significant emphasis regarding humanitarian supply chain organization barriers where the managerial and

organizational departments are operating. The aforementioned barriers affect the success of humanitarian supply chain firms in instances where sharing of information sharing and service delivery of commodities for the refugees is needed. Thus, strategies need to be incorporated to overcome the barriers.

6.1 Limitations and Future Studies

This study linked the findings with existing literature on information sharing to explain the conceptual factors limiting IS, it is clear that they are not sufficient in themselves to provide comprehensive explanation. Therefore, future research should strive to explain these factors separately. Sources used indicate that qualitative studies are biased, small scale or anecdotal, and lack rigor unless they are carried out properly to ensure that they are unbiased, in-depth, valid as well as reliable, credible plus rigorous. Only eight cases were sampled purposefully to ensure that knowledgeable participants are identified and selected more effectively using limited resources. However, the method is limited since it is a non-probabilistic sampling method which is characterized by biasness and lack of representation to allow generalization of the findings to information sharing among humanitarian supply chain partners. In addition, it is also difficult to control for potential known or unknown confounders. This calls for future studies to use random probability sampling techniques, larger sample size and even comparative study design to allow valid and reliable generalization of the conceptual factors to humanitarian actors across countries with similar context to Jordan. Furthermore, future research should consider mixed study design with quantitative and qualitative approach in order to improve quality of the findings. For instance, using longitudinal data would clearly explain the mechanisms employed by organizations to share information and how the process is affected during validation of the observed relationships.

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