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Social Capital as Mediating Variable between Social Media Use and Humanitarian Crises Response by Non-Profit Organizations in Yemen

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Abstract

The major challenge that faces relief organizations during humanitarian crises is their ability to make proper decisions to respond in a timely manner through the diverse knowledge and information received from the disaster area. This study explored how Yemeni local relief organizations benefited from social media in their response decisions and early intervention through the study of their efforts during the current armed conflict in Yemen. The study focuses on the participants' tools in making right decisions about the response, through building social capital in the virtual community as mediating variable, and their transformation into tangible results in real society. The data were collected by the distribution of 530 questionnaires to managers of organizations that had the participation in emergency or disaster relief in Yemen. Data were collected from the questionnaires and analyzed through quantitative method. Results showed that there was a speed in the accessibility of backgrounds for decision-making through social capital building inside social media, as well as accuracy in the nature of the intervention and response during crises. These results indicate the importance of social capital online developing the use of social media in the process of public communication during humanitarian crises to reduce the problem of the delayed response and prevent random relief works.

Keywords: Social Media; Response to humanitarian Crisis; social capital online; Access to information; knowledge sharing; Interactive participation.

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1. Introduction

During humanitarian crises, relief organizations are often riddled with innumerable communication as people attempt to contact with their families and friends in the disaster area, and get access to information on food, shelter and transportation [1]. This was supported by Leong and his colleagues [2] who confirmed that crises response phase is a complex set and quick, unexpectedly occurring events. To overcome these circumstances, three types of social support are critical: information, material, and emotional support, whereby communities are depended on for the latest crisis information for guidance in an unfamiliar situation. Society, organization or humanitarian crisis is characterized by non-trivial threats to life, well-being, or other much held values [3]. Currently, the conflict in Yemen brought about an increase in emergency humanitarian assistance, where humanitarian relief organizations in Yemen are estimated to add 21.2 million people (82% of the population), who are in need of humanitarian aid to meet their basic needs [4].

In this background, it becomes pertinent for decision makers gather information to assess the scope and nature of the crises before response, while reducing information and communication channels for quick and prompt response [5]. However, coordinating, collecting, synthesizing, interpreting, and communicating information across multiple organizations has been a central challenge in crisis response [6]. Hence, the very process of gathering and disseminating information during crises often results in unacceptable delays in crisis resolution [7]. Thus, the absence and presence of information pose challenges during crisis response resulting in a tension between the need to act and the need to gather information [8]. Currently, In the same context, social networking through Twitter, Facebook and similar platforms is widespread and is a main avenue through which members of the public communicate about the disaster, during and after the happening [9]. These internet and smartphone-based platforms facilitate discourse among people affected by a disaster and those who want to help them. Such discourse and instances of communication with organizations can raise the level of social capital in order to response decisions speed and as such, they can be measured as effective in providing help in emergencies [10].

1.1 Use of social media

According to Wright and Hinson [11] that social media are digital or mobile tools that are interactive, allowing users not only to access, but also to create or influence the content [12]. This definition focuses on interactive participation, access to information and the exchange of knowledge that are the most important social media properties that we would eat during this study. Parallel with the advancing technology, social media is becoming increasingly popular and often used to share and obtain information during natural disasters throughout the world [13]. Hence, parallel with the advancing technology, social media is becoming increasingly popular and often used to share and obtain information during natural disasters throughout the world [3].

In the past, social media have been used to publish eyewitness accounts after a disaster. Today, social media can be a valuable source of information to obtain situational awareness during and after a disaster. More recently, the disaster relief agencies have recognized the potential of social media as an information outlet. Hurricane Irene was the first natural disaster, where the official agencies used social media to spread information about

disaster awareness and preparation [14]. Similarly, social media was the basic tool in the industry used in response decisions during Chapala floods in 2015 in some Yemeni cities [4]. Currently, some studies have indicated that the use of social media is becoming gradually important as a main source of information during crisis periods. For instance, [15], in his a study that examined the 2007 wildfire disaster in Southern California, United States, the researchers found that peer-to-peer communication through social media such as social networking sites, text and instant messaging applications, blogs, wikis and other web forums were widely used for supporting additional, often critical and accurate, dissemination of information within the public sphere.

In the same context, indicates Alexander [16], social media is used in seven different ways during response to humanitarian crises: listening to the public debate, monitoring situations, extending emergency response and management, crowdsourcing and collaborative development, creating social cohesion, furthering causes it includes charitable donation and enhancing research. Therefore, disastrous conditions such as a flood invasion are expected to strengthen group cohesion, as community members realize the importance of cooperating to achieve mutually desired goals through reconstructing the community in the wake of a disaster. Often, disasters

can destroy community cohesion as individual interests become more salient and people look after their own interests [17].

1.1.1 Access Information

According to Davenport and Prusak [18], reciprocity is one of the factors that drive people to share information. Individuals who share information believe that sharing information with others will lead to their own requests for information being met in the future. Bock and Kim [19] also noted that the individual who has received help feels that in future they must reciprocate the help, while Hsu and his colleagues [20] found that people are more motivated to share information in communities if there is the expectation of receiving better cooperation in return. In a disaster event, people are usually uncertain about the information. The victims Humanitarian crises need information relating to food, shelter or medical relief.

Social media has provided unique styles of supporting social processes along with the traditional management for data, information and knowledge in organizations. We should acknowledge the central role of collaboration and support of social processes for communication and managing knowledge in the modern organizations by using social media [21]. Nevertheless, Mayfield [22] observed that participation in social media changes the styles of information that pass across societies and around the world. The reason for that, as indicated by

Lindsay [23], can be attributed to the rapid spread of social networking sites, and media sharing technology.

1.1.2 Knowledge sharing online

Knowledge sharing is not a new concept for agencies involved in disaster response. Since each disaster is unique and presents entirely new environmental, geographical, political, economic, and sociological concerns, it is normal for responders to build new knowledge structures on the fly to capture important information for later reuse. Previous research has shown that in times of disasters, people and organizations improvise and adapt to

cope with their new condition and environment [24]. Thus, knowledge systems typically are organized such that this knowledge may be quickly adapted and reused for the new response effort. Finally, responders are used to

consolidate information quickly and presenting it to decision makers with the authority to re-task necessary assets [25].

Knowledge sharing plays an important role during disasters to help save lives, delivering immediate relief, supporting victims and minimizing the effect of the disaster [26]. According to the United Nations Disaster Assessment and Coordination Team, effective knowledge sharing are important to help coordinate collective efforts among agencies in order to minimize the disaster's effects [27]. Through effective information management, the relevant organizations can access the right information about the disaster, make the right decisions, and plan the appropriate actions. This leads to me, limiting the effects of the disaster, reducing the loss, and quickly redeveloping the victims' wellbeing [28].

1.1.3 Interactive Participation

Social media are an example of interactive media, both use of graphics and text to allow users to share photos and information that allow people to interact with the data for appropriate purposes [29]. Chatfield and Scholl [30] explained the interactive concept using Web 2.0 social media by ordinary citizens to transform the public sphere and engage in collective action during disasters or political events. These platforms have enabled users to communicate and engage directly with their friends and organizations then develop new forms of interactivity, both pertinent and banal in nature by analysing the content of multiple social media profiles [31]. During disaster management, information sharing should not be limited among the organizations only but should also involve the individuals who are affected by the disaster. Through effective information sharing, they can receive information about the current situation and most important information about food, clothing, and medical supplies [30].

However, the value of interactive participation is not new in their technological brilliance, but in their ability to facilitate new methods of participation and support widespread social networks with agendas of issues to serve the community [32]. Hence, we can use of social media to mobilize an online movement that moved offline through users' motivational comments, in addition to their use of links and other interactive elements of Facebook [33]. Accordingly, social media tools have much potential for encouraging preparedness and interactive participation, as they can invite individuals to self-identify as supporters of the relief organizations [34]. Also, at the same time, social media are digital or mobile tools that are interactive, allowing users not only to access, but also to create or influence content during disasters [35].

1.2 Social capital online as mediating variable

Clearly, social media sites are designed to connect people with friends, family, and other strong ties, as well as to efficiently keep in touch with a larger set of acquaintances and new ties. Therefore, they have strong potential to influence others, which often flows from social capital [19]. Usually, receiving messages through social media, from friends is associated with increases in bridging social capital. However, with social media used

passively, news consumes more time, but nevertheless increases social connectedness and the value of those connections [19].

In recent studies about social capital in relation to the network society, most of the results claims that the Internet encourages social connections and involvement rather than prior concerns of decrease of social involvement or social displacement [36]. According to Kaigo [37], social media can provide social support and social interaction that made possible a wide region during disasters. Social media has become the supplier of information and knowledge for the citizens during disasters in the early days of disasters through building social capital in the virtual community.

1.2.1 Social Coordination Online

Coordination is a central, challenging issue in disaster relief systems that focus primarily on designing coordination protocols and mechanisms to manage government and non-profit organization's activities [38]. Research has shown that it is possible to leverage social media to generate community crisis maps and introduce an interagency map and allow organizations to share information as well as collaborate to plan and execute shared missions. This also allows organizations to share information by social media if they operate on the same platform or use similar data representation formats [39]. Certainly, many organizations may be very willing to become involved and help in a disaster response but putting organizations in touch and incoordination in the midst of a crisis can prove quite a challenge. It is preferable to know the organizations and the people who work with them beforehand through social capital [24].

1.2.2 Volunteerism Online

Volunteering and informal helped to create social capital, which has been linked to social cohesion: as a building block of social cohesion [40]. Today, online volunteering means volunteer activities that are completed, in whole or in part, via the Internet from a home, work, or public access by computer, usually is in direct support of or through non-profit organization depends on the volunteers [41]. Virtual volunteering, providing volunteer service through the Internet and home or work through their computers, or organizations use the Internet to engage volunteers in support of their projects through a variety of methods and techniques [40]. One of the most interesting phenomena out of the Internet revolution is used as a conduit for social development. Were the volunteers who work in teams, to improve the lives of millions of people all over the world [42]. Exposure and attention to social media content during disasters may motivate individuals to become more involved in helping those affected. Moreover, one benefit of social media is that people do not necessarily have to be in the disaster area to help. Following a disaster, users can assist the response by curating available information on the event

and then contributing to disaster maps, by collating online disaster information, and by raising awareness of the situation via their online social [40].

1.2.3 Social Cohesion Online

Definition of Rosell [43] and Maxwell [1], states that social cohesion involves "building shared values and

communities of interpretation, reducing disparities in wealth and income, and generally enabling people to have a sense that they are engaged in a common enterprise, facing shared challenges and that they are members of the same community. Social cohesion is a crucial but invisible force to make individuals together as a unit in the community. The cohesion itself can be regarded as a dynamic process reflected in the tendency for a group to stick together and remain united in pursuit of its goals and objectives. Although group cohesion is a meaningful topic, contemporary research has paid little attention to the impact of disasters on group cohesion in real-life situations [17]. On the other hand, internet access is helping in creating socially connected communities. Access to the internet is a vital component of a happy and productive society [44]. Yet the actual potential of the internet to shape social settings, in which it is used, to cause certain outcomes, is the subject of debate among researchers [45]. Now, the view that it may be more helpful to think of the internet as being socially constructed a technology that is shaped by people in social contexts for their own purposes [46].

1.3 Response to Humanitarian Crises

Humanitarian crises are defined by the United Nations as a serious disruption of the functioning of a society, and it refers to disasters which causing widespread human or environmental losses exceed the ability of the affected part of society to cope adequately using only its own resources, where the public participants and emergency managers in the crises need to use information and communication systems in order to decide upon actions [47]. As humanitarian crisis is defined as a singular event or a series of events that are threatening in terms of health, safety or wellbeing of a community or large group of people [4]. It may be an internal or external conflict and usually occurs throughout a large land area. Local, national and international responses are necessary in such events [48]. Maldonado and Tapia [49] claimed that all crises, whether intentional or accidental hazards, require a coordinated response among a variety of people and organizations and have severe consequences for the safety of communities. However, this definition does not specify the means that can be used to gain access to such response.

Humanitarian crises can either be natural disasters, man-made disasters or complex emergencies. In such cases, complex emergencies occur because of several factors or events that prevent a large group of people from accessing their fundamental needs, such as food, clean water or safe shelter. Examples of humanitarian crises include armed conflicts, epidemics, famine, natural disasters and other major emergencies If such a crisis causes large movements of people it could also become a refugee crisis [4]. Therefore, humanitarian crises can affect the structures of society by disrupting economic development, increasing income and wealth iinequality, marginalizing certain groups, and by leading to large-scale migrations. Crucially, humanitarian crises can also

effect on weaken state capacity and legitimacy, creating opportunities for the disgruntled both with violent civil conflict or natural disasters [50].

It is crucial for decision-makers during disaster to keep up with developments towards better elaboration and the provision of appropriate means of facing natural risks. This has been realized through social media use by many organizations, governments and companies all over the world [51]. Although social media can positively impact disaster relief efforts, it does not provide an inherent coordination capability for easily coordinating and

sharing information, resources, and plans among disparate relief organizations only through social capital online creating. However, applications based on social media applications offer a powerful capability for collecting

information from disaster scenes and visualizing data for relief decision making [52].

2. Research Framework and Theoretical

The research framework of this study consists of four variables (independent variable, mediating variable, moderating variable, and dependent variable), where this study expected to investigate the online social capital mediates the relationship between social media and responding to humanitarian crisis. According to Palen and Liu [53], the mediating variable functions as an independent variable, which also contributes in order to conceptualize the relationship between independent variable and dependent variable based on clarification about

the role of mediating variable [54].

The Uses and Gratifications (U&T) theory are adopted by this study as the underpinning theory. The former serves as the main theory. More specifically, in literature, Baran and Davis, [55] confirmed that this theory discusses how users deliberately choose media that will satisfy given needs and allow them to enhance knowledge, relaxation, social capital, social interactions/companionship, diversion, or escape [56]. In order to understand social media use among the satisfactions derived from using the social media to gain knowledge about humanitarian crises, the uses and gratifications (U&G) theory was used as the theoretical framework of this study as recommended by Blumler and Katz [57*]*. In addition, the theory of social exchange was adopted

as a second theory in this study as a supportive theory of social capital as a variety of mediation between the use of social media and respond to humanitarian crises [58] .

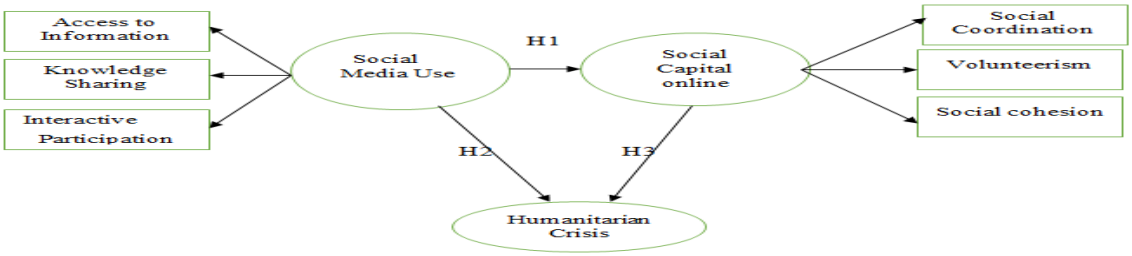

Figure 1: Conceptual framework and Hypotheses Model

H1: Social Media use has a significant positive effect on social capital online

H2: Social media use has a significant positive effect on response to humanitarian crisis

H3: Social capital online has a significant positive effect on response to humanitarian crisis

H4: Social capital online mediates the relationship between social media use and response to humanitarian crisis.

3. Methodology

Quantitative research design is appropriate for the current study. This is because it hopes to investigate the effect of social media use in response to humanitarian crisis via social capital as mediating role by employing hypothesis testing that requires a quantitative technique to deal with the data. In this study, data will collect via a self-administered survey using stratified random sampling method. The number of employees (population of the sample) is distributed among managers of non-profit organizations in Yemen.

3.1 Questionnaire Design

This study used the survey method to collect the primary data. The questionnaire is designed to include two parts. The first part includes demographic information about the respondents, including organization activities, organization type and kind of activities and programs.

The second part will ask the respondents about the variables of interest in the study, which are (1) response to humanitarian crises, (2) social media use dimensions, (3) online social capital dimensions. The first factor is endogenous variable and factors 2 and 3 are exogenous variables.

Of the 530 surveys, 367 questionnaires were returned which represented approximately 75% response rate Due to some cases of missing values, 25 questionnaires were excluded from the analysis and 18 cases were outlier; thus, a total of 354 usable questionnaires was utilized with a 73 % response rate. The sample size of n=354 was considered as sufficient for this study. The study sample size (N=354) achieved the ratio of 5:1 as recommended by Hair [59].

3.2 Analysis and Results

3.2.1 Descriptive Statistics for Variables

Table 1 shows that the highest mean was social coordination (SCO) with 4.134 out of a maximum 5amaking up 82%%. This is followed by access to information (INF) at 3.988 making up 80% and humanitarian crisis (HUM) was 3.711 or 74%.

On the other hand, social cohesion (SOH) had the lowest mean with 3.244 making up 65% and the mean of these values (overall mean) was 3.673 out of a maximum 5 or 73%.

In addition, the standard deviations (S.D) for all variables range from 0.715 to 1.164, which reflects existence of considerable acceptable variability within the data set. Table 4.11 presents descriptive statistics for all variables.

Table 1: Descriptive Statistics for Variables

Variable	Demission	Code	Mean		S.D.	
Social Media Use	Access to Information	INF	3.988		.987	
	Knowledge Sharing	KNW	3.475		1.143	
	Interactive	INT	3.500	3.654	1.128	1.045
(USE)	Participation					
Social Capital Online	Social Coordination	SCO	4.134		.893	
	Volunteerism	VOL	3.631		1.164	
(SOC)	Social cohesion	SOH	3.244	3.669	1.086	1.102
	Humanitarian Crisis (HUM	HUM	3.711		.822	
Overall			3.673		.840	

3.2.2 Reliability and Composite Reliability

The instrument's reliability is revealed to be more than 0.60 which is acceptable [59]. This study conducted two types of reliability tests. The first type is Cronbach's alpha via the use of SPSS 22.0 and the second type is composite reliability (CR). The current study indicates the reliability (Cronbach's alpha) values ranged from 0.855 to 0.932 while composite reliability (CR) values ranged from 0.860 to 0.932. Therefore, all values for reliability and composite reliability constructs were greater than the recommended value of above 0.60. Table 2 presents reliability (Cronbach's alpha) and composite reliability for the constructs.

Table 2: Cronbach's Alpha and Composite Reliability for the Constructs

Variable	Factors	Code	Number of items	Cronbach's alpha	Composite Reliability
Social Media Use	Access to Information	INF	5	0.891	0.891
	Knowledge Sharing	KNW	5	0.887	0.901
(USE)	Interactive Participation	INT	4	0.855	0.860
Social Capital Online	Social Coordination	SCO	4	0.892	0.902
	Volunteerism	VOL	5	0.932	0.932
	Social cohesion	SOH	5	0.907	0.920
(SOC)	Humanitarian Crisis (HUM	HUM	8	0.855	0.865

3.2.3 Convergent and Discriminant validity

In this study, the factor loading of the items are more than 0.50 and are acceptable if the study sample is more than 300 respondents (Hair 2006, p. 128). This, in turn, is sufficient evidence of convergent validity. Therefore, all indicators in the present study are related to their constructs, and thus there is satisfactory proof of the convergent validity of the model.

Discriminant validity gives the extent to which a construct is truly distinct from other constructs (Hair and his colleagues 2010). Discriminant validity is evaluated by using Average Variance Extracted (AVE) for every construct that exceeds the squared correlation among other constructs [67] (Fronell & Larcker, 1981).

Discriminant validity was indicated, as the AVE values are more than the squared correlations for each set of constructing. In addition, the square root of the AVE for a given construct was greater than the absolute value of the correlation square of the given construct with any other factor (AVE > correlation square). Table 3 shows the square root of the AVE for all constructs greater than the correlations between the construct and other constructs in the model.

Table 3: Discriminant Validity (AVE) and C.R. for Latent Variables

	CR	AVE	SOH.`	VOL.	INF.	INT.	KNW.	HUM.	SCO.
SOH.	0.920	0.698	**0.835**						
VOL.	0.932	0.733	0.661	**0.856**					
INF.	0.891	0.672	0.135	0.219	**0.820**				
INT.	0.860	0.606	0.538	0.624	0.217	**0.778**			
KNW.	0.901	0.652	0.540	0.647	0.199	0.772	**0.808**		
HUM.	0.865	0.458	0.534	0.656	0.340	0.785	0.723	**0.677**	
SCO.	0.902	0.697	0.235	0.270	0.630	0.298	0.301	0.380	**0.835**

3.2.4 Confirmatory Factor Analysis (CFA) Results –Full Measurement Model

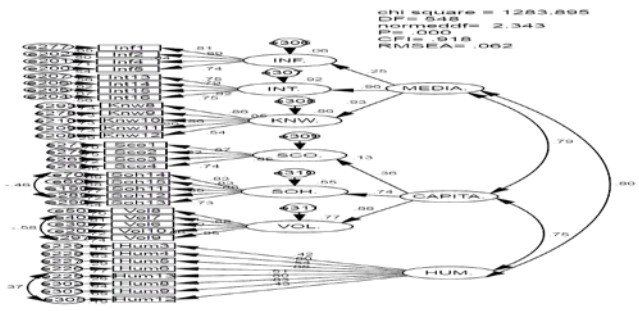

Figure 2: Full Measurement Model

In this research, most of the indices showed achievement of a good fit as per recommended values (Hair and his colleagues 2010). The final model showed the ratio of the chi-square to the degree of freedom (normed $\chi 2$)was 2.343, less than 5 indicating a good model fit and the RMSEA is 0.062, less than 0.08 which is considered a good fit (Hair and his colleagues 2006). Also other measures indicated GOF of the model to the data (CFI = 0.918, IFI= 0.918, TLI= 0.910) which indicated that the model employed in this study is a good fit to data (Schumacker & Lomax, 2004; Lee and Kim, 2007). Figure 1 shows the measurement model for exogenous and endogenousvariables**.**

3.2.5 Structural Model

The following sections explain the structural model for main hypotheses. This study examines two exogenous variables which social media use and social capital online as well as one endogenous variable is response to humanitarian crises.

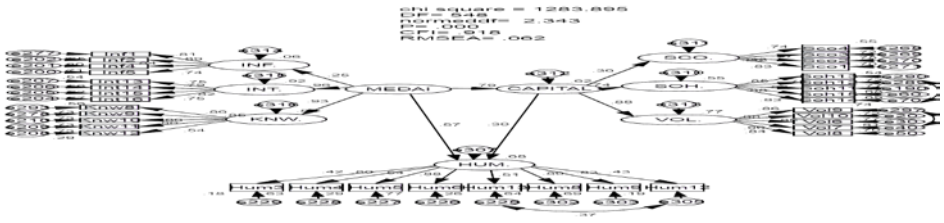

Figure 3: The results of the structural model

The results of the structural model show the model fit indices such as the values of chi-square ($\chi 2$) was 1283.895 and degrees of freedom was 548. Furthermore, the findings show that normed $\chi 2$ value (ratio value) was 2.343 less than 5, indicating a sufficient fit. In addition, CFI= 0.918, TLI = 0.910, IFI = 0.918 and RMR = 0.095 is less than 0.10 which explain that the model employed in this research was a good fit to data. Moreover, the results also indicate Indices). that RMSEA = 0.062 which was the recommended less than of 0.08 Hair [56]. Figure 4.2 below shows the results of the structural model with Standardized Estimated (Goodness of Fit.

3.2.6 Direct Hypothesis Results

The findings from the empirical study, as shown in this section, offered interesting results for discussion, which extended the earlier research. As noted in Table 4 four direct hypotheses related to the aims of this study were developed and tested. These hypotheses relate to the direct path between the variables of this study and all of them were supported.

According to the results in Table 4 social media use is the important factors influence on social capital online and responding to Humanitarian crisis among relief local organizations in Yemen. The result indicates social media use has a strongly significant and positive impact on social capital online and responding to humanitarian crisis in Yemen (β = 0.787; C.R =5.123; P = 0.000 and β = 0.567; C.R =5.150; P = 0.000) respectively. Therefore, H1 and H3 are supported. In addition, social capital online which had a significant and positive

effect on the response, humanitarian crisis, thus H2 is supported (β =0.300; C.R = 2.963; P = 0.003). Table 4 presents that the direct hypotheses results.

Table 4: Direct Hypotheses Testing Result of structural Model

Hypothesis	Exog.		Endo.	Estimated	C.R	P-Value	Status	Result
H1	Social Media	⇨	Social Capital	.787	5.123	.000	Sig.	Supported
H2	Social Capital	⇨	Humanitarian	.300	2.963	.003	Sig.	Supported
H3	Social Media	⇨	Humanitarian	.567	5.150	.000	Sig.	Supported

3.2.7 Indirect Hypothesis Results - (Social capital Online -Mediating Role)

The findings show in Table 5 social media use impact on social capital online, and the standardized coefficient was 0.787. Also, this finding shows the direct influence of social capital online in response to the humanitarian crisis, and the standardized coefficient was 0.300.

Therefore, based on the positive direct relationship between social media use and response to humanitarian crisis (0.567), we examine the mediation effect of social capital online between the relationship of social media use and response to the humanitarian crisis, and the finding that showed in Table 5 reveals a significant relationship and social media is indirectly impacts on response to humanitarian crisis through their impact on social capital online with coefficient 0.236.

Therefore, the results of the study indicated that social capital online is partial mediation between social media use and response to humanitarian crisis as shown in Table 5.

Table 5: Structural parameters of the mediating role of social capital online for the Relationship between social media use and response to humanitarian crisis

	Model	Direct effect	Indirect effect	Significant of indirect effect	Mediation type
H1	social media Use ---> social capital online	0.787		P=0.001 Significant	Partial Mediation
H2	social capital online -----> response to humanitarian crisis	0.300		P=0.001 Significant	
H3 and H4	social media Use ---> response to humanitarian crisis Via social capital online	0.567	0.236	P=0.005 Significant More than.08 significant	

4. Discussion and Finding

The main research objective aims at identifying the relationship between social media use, social capital online, and response to humanitarian crisis among relief local organizations in Yemen and the mediating role of social capital online between social media use and response to humanitarian crisis. This study obtained evidence that the social media and social capital online had a significant and positive effect on response to humanitarian crisis and partial mediation for social capital on the relationship between social media use, social capital online and responding to humanitarian crisis in Yemen. This study extends to cognitive engagement using technological determinism theory and the uses and gratifications theory that is previously used by scholars in traditional mass media and internet making it possible to use them in social media. The results of the study have some implications, it's proven that the response to humanitarian crisis among relief local organizations. It is through practice, preparation, and familiarity that social media can be used to the fullest in humanitarian responses. Furthermore, social media and social capital online can be an extremely effective tool in these humanitarian situations, and by optimizing its use, relief local organizations in Yemen can better uphold the humanitarian crises and alleviate suffering for more victims of humanitarian crises by social media use for building social capital. . Finally, this study can serve as a guide to practitioners, social policy makers, governmental and non-governmental as well as relief local organizations and the media how to integrate citizen participation in social life, during crisis especially in the Middle East and in Yemen in particular.

5. Conclusion

This paper reviewed the actual and potential use of social media in emergency, disaster and crisis situations in context social media use (Facebook, Twitter) for create social capital and strengthen social networks in field of emergency response and management, crowd-sourcing and collaborative development, furthering social coordination and online volunteerism (including charitable donation) and enhancing research. Previous studies indicate that social networks, trust, social support, social interaction, volunteerism and social cohesion are dimensions of social capital that social media platforms create during humanitarian crises to achieve social stability that helps to respond early to crises. This study was limited to volunteering, coordination and cohesion because of the need to be available in response to humanitarian crises. Social media still faces many challenges in terms of the rapid exchange of information among members of the virtual community and the potential for exposure to rumors.

6. Recommendation

The majority managers of NPOs in Yemen are not aware of the many benefits of social media use during humanitarian crises and the promotion of this awareness through information and training programs is thus necessary.

- Yemen government should improve the infrastructure to emergencies centers and information collection through benefit from new networks communication use and social media information.
- NPOs need to adopt new media system in their response to humanitarian crises because they need to

speed in collect of information in order to early response

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