Using Social Media in governance and Crisis Communication: Case Study of the Lebanese Garbage Crisis

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Abstract

Using social media in governance and crisis communication has been widespread in various fields worldwide and has been affecting, not just new generations, but also all generations as well as organizations on a global scale. This paper looks into recent eventsand trends with regard to the use of social media in governance and crisis communication, most notably in the up-to-the-minute Lebanese garbage crisis. It also highlights the changing landscape of crisis communication. Specifically how social media can be helpful to crisis managers, but at the same timecausesome predicaments for them. It explores diverse practices of crisis in the field of communication. Experts use the best current practices in crisis communication, andthe prospects of using social media tools to manage potential risks or crises. Best practices in risks and crises communication are itemized and summarized throughout this paper.

Keywords Crisis-communication, governance, social-media, Twitter, Facebook, YouTube, Lebanon

Introduction

New information technology (NIT) has revolutionized the way we live and conduct businesses. It actually transformed how organizational crises are managed and dealt with for conflict resolution and utmost productivity. Therefore, social media have become key players in disseminating information to affected entities in crisis. The advancement of mobile media such

as smart phones and tablets along with Internet access and digital video equipment are restructuring the complex communication systems, frameworks, and the ways we interact with one another. Research findings suggest that about a third of our youths who are active online communicators are using platforms such as blogs, social networking sites, online videos, text messaging, and various communication tablets (Smith, 2010a). These social mediaplatforms are low cost or free fora for expressing ideas, opinions, and thoughts concerning crucial organizational issues. They do not just offer more prospects to connect and exchange new paths for international outreach, but also localoutreach, to crises inorganizational communication (Wright & Hinson, 2009).

Diffusion of innovation theory proposed by Everett M. Rogers in 1962. It supports the sharing of information in crisis. Therefore, during crisis each employee should think "out of the box" and come out with something innovative to overcome tough times. One must be prepared with alternative plans of action. Once an employee comes up with an innovative idea, he/she must not keep things to himself/herself. Instead, he/she should spread the idea amongst all employees and departments. Effective communication is essential to pass on information and ideas in their desired system to all stakeholders.

In addition, Attribution Theory holds that people make judgments about causes of events, mainly unforeseen ones with negative outcomes. Attributions are "perceptions of the causality or the perceived reasons for a particular event's occurrence" (Weiner, 1985b, p. 280). People will attribute the cause of an event to an individual involved in the event (personal causality), or to an outside entity (external causality). Attributions imply that the cause of the event is controllable by those involved (McAuley, Duncan, & Russell, 1992; Weiner, 1985a; Weiner, Perry, & Magnusson, 1988). Causal attributions are important because they affect emotions generated by the event and future interactions with the person involved (Weiner, 1985a). Crises are the types of events that trigger attributions; crises are usually negative; and, consequently, people make attributions about the causes of events.

Was the Lebanese garbage crisis an event the government could control? Control implies responsibility (Weiner, 1995). If stakeholders believe the government could control that crisis, then, they will also hold the government responsible for that crisis, which is currently the case. The purpose of this research paper is to examine the extent to which Lebanese people attributed responsibility to the Lebanese government and the effect of those attributions on behavioral intentions. In addition, we look into recent events, practices, and trends with regard to the use of social media in governanceand crisis communication to manage potential risks and crises. An extensive literature review focused on using attribution of responsibility to forge a connection between crisis response strategies and the garbage crisis. To what extent social media used to inform the Lebanese public about Lebanon's current garbage crisis? What is the government plan in place to take care of this crisis? How did public react to this crisis?

Literature review

First, crisis communication refers to an unforeseenincident thatmay cause harm to acompany, government, or other entities byway of turbulences and major unrest amongst pretentious stakeholders. Crisis communication gives rise to a feeling of fear and risk in individuals who ultimately lose interest and trust in the establishment. Crises also have a reputational element. A crisis does inflict harm on the corporation's standing because of the negative information it generates about the corporation (Barton, 2001). Today, it is appropriate to create the categories of operational crises and reputational crises (Sohn&Lariscy, 2014). In addition, crisis communication is valuable, for it enhances preparedness and response as it helps to raise the level of awareness of citizens and their ability to take the necessary measures. Coombs (2014) defines crisis as a significant menace to operations or reputations that can have negative consequences if not handled properly. In crisis management, the menace is the possible harm a crisis can impose on a corporation, its stakeholders, and an industry. A crisis may lead to three related dangers; namely public safety, financial, and reputational loss, which are all highly related.

Second, governance consists of the logic of action and the causal relations between structures, interests and interactions (Kooiman, 2007). This concept transferred from the societal to the organizational level. Corporate governance connotes the overall framework for the guidance and control of a company in a link with many stakeholders (Tricker, 2009; Hopt, 1998). Van Kersbergen and van Waarden (2004)highlight the significance of corporate governance by stating that the "relations between actors pose specific risks and uncertainties" and that there is a need for different mechanisms "to reduce these in order to make cooperation possible or easier" (p. 152). In addition, governance encompasses all institutional structures and processes used to handle interdependencies amongst diverse, mostly collective, actors (Kooiman, 2007; Van Kersbergen and van Waarden, 2004).Linke, and Zerfass (2013) propose the concept of social media governance that is corresponding to the notion of an overall framework as implied by corporate governance. Social mediadenotes formal or informal frameworks, which regulate the actions of corporate members within the social network. Therefore, when considering the practice of social media governance, two different understandings are relevant: a concept of governance focusing solely on social media policies and a wider understanding of governance based on broad regulatory frameworks.

Third, social media consist of Facebook, Twitter, YouTube, LinkedIn, the Internet and all of its various applications, which speed up communication and awareness over and beyond that of the traditional crisis communication strategy via traditional media because they allow real time communication. It can help avoid many arrivals to the tragedy site, can foster the recall of products, which are dangerous for an entire population, etc. Besides, crisis communication is likely to improve transparency of decision. Politicians are not transparent enough. Moreover,

crisis communication increases the potential acceptance of outcomes, due to placing citizens in an active role of information sharing at the same time they are suffering the impact of a disaster.

The Organization for Economic Co-operation and Development (OECD) was amongst the first corporations to identify risk and crisis communication as crucial topics in the 1990s and beyond. For instance, in 2003, OECD pointed to new technologies such as remote sensing, which held the potential to enhance early warning and consequently risk and crisis communication. In 2011, the OECD also pointed to the development of new communication technologies that could be useful during disaster covering across diverse media platforms such as those accessible by the Internet and social media. The emergence of Facebook, Twitter, YouTube, blogs, amongst others denotes a prospect to expand threats to various sectors of the population in times of danger. However, despite their usefulness, governments view social media with particular carefulness due to the cost that could be contained by trying to keep pace with rising citizen expectations.

Since social media are becoming more pervasive by the day, we are beginning to witness governments worldwide use social media as communication tools to engage citizens (Golbeck et al., 2010). Research has shown that governments making use of many social media platforms for myriad governmental needs: 1. recruiting government staffers (Dorris, 2008), 2. reaching out to the public, 3. sharing information throughout numerous and interdependent governmental agencies (Chang & Kanan, 2008; Dorris, 2008), 4. creating an environment where community participation is possible (Dorris, 2008); and 5. governing in a transparent manner (Bertot&Jarger, 2010; Bertot, Jaeger, & Grimes, 2010). While some scholars observe that political discourse is a surging field for social media research, but Graham & Avery (2013) placed its focus on local governments. A national research by Graham and Avery (2013) has shown that local governments, in general, are underutilizing social media. Nonetheless, at least half of local governments surveyed said that they make use of social media to a certain extent. Since governments need to convey vital information to the public during a crisis, they must make good use of social media and engage their citizens in a more active manner. Their communication must reflect a clear sense of responsibility and show that they have plans, which make them ready to respond firmly to any potential crisis. Uses and gratification theory explains how people use media for their need and gratification. Ruggiero (2000 & 2009) notes that uses and gratifications theory has always offered a pioneering theoretical approach in the initial stages of each new mass medium: newspapers, radio, television, the Internet, and now social media.

By using social media, governments can communicate more effectively with their citizens than with traditional media as used to happen in the past century. Furthermore, mass communication through social media is much cheaper and helps to preserve valuable resources, such as time

and money (Kingsley, 2010; Kuzma, 2010). Most national governments got some form of social media usage, this includes Facebook, Twitter, YouTube, among many others (Bertot, Jaeger, Munson, &Glaisyer, 2010). A research by Bonson, Torres, Royo, and Flores (2012) that looked into the usage of social media platforms for European governments found that more than half of municipal councils have taken the initiative to make use of various social media platforms for day-to-day governance. With a social media presence, many of them have realized great success (Graham, Avery & Park, 2015). With social media, they can effectively disseminate news to its citizens easily and quickly. This, in turn, has helped them increase their outreach level at atrivial cost. The main benefits that social media offer the public sector are added opportunities for engagement with citizens and enhanced transparency (Bonson et al., 2012). Since meeting and/or exceeding the expectations of the public are primary concerns for government entities, government officials and agencies are using social media feedback to understand what their citizens are thinking of and what they expect from their government (Avery & Graham, 2013)

Social media have been actually catalysts and possibly the reason why much political change has occurred in the world recently. Of course, the 30 million strong in Egypt constitute a very explicit result of change in governance due to social media. However, there are also numerous examples where social media play a decisive role in maintaining a good governing status quo or changing governing regimes altogether (Graham et al., 2015). In general, the aim of crisis communication through social media is to convey the right information in an expedited form and to receive feedback as soon as possible (Avery & Graham, 2013). Research has shown that during a crisis, the public's reliance on social media to get vital information increases (Smith, 2011). Furthermore, social media provides truthful facts, as opposed to the mainstream media, which often acts with conflicting interests (Procopio&Procopio, 2007).

It is important to always look to Coombs' (2007) situational crisis communication theory, (SCCT), whenever studying the application of crisis communication. In its essence, the SCCT states that, when responding to a crisis, an organization must act in a manner of responsibility, which is proportional to the threat it is facing (Coombs, 2007). Social media crisis communication (SMCC) does a very good job in outlining the interactions between an organization and its public. The SMCC speaks of the initiator in a crisis communication involving people who create crisis information. This information needs to be accurate and reflects reality. The second angle in SMCC is social media direct followers. These people are the ones who receive the information top-down in a direct fashion. The second angle is responsible for communicating the information, which they receive to the third angle, indirectly and in a horizontal fashion. The third angle is, more or less, social media somewhat inactive. When crisis managers are able to identify the three various angles which receive SMCC messages, they are able to tailor their messages to meet the needs of the situation. They are also

able to manage the crisis better as the events play out in response to their crisis communication (Veil, Buehner, and Palenchar, 2011).

Practitioners must select the appropriate social media platform for each situation, which may confront them. They can select from a vast range from social network websites, including but not limited to: Facebook, Google-PLUS, Twitter, Instagram, and YouTube, in addition to 'Vimeo.' An organization may want to use all of these platforms at once to communicate during a crisis. However, in other cases, there may be one platform, which is more suitable. In the 2008 wildfires case in the US State of California, Twitter was the preferred platform. Itwas used by the State Authorities to share vital information and updates with the citizens who were potentially impacted (Sutton, Palen, &Shklovski, 2008). Following the Asiana Air flight 214 in Los Angeles Airport in July of 2013, the United States National Transportation Safety Board made good use of Twitter and YouTube social media platforms to inform the public about the investigation and distribute information from related press conferences (Derner, 2013). Facebook was the main social medium tool used following the strong earthquake that hit Haiti in 2010; images of the aftermath quickly went viral with the use of Twitter, Facebook, and YouTube. In the case of Hurricane Sandy in the American Atlantic Coast, New Jersey Governor, Chris Christie, and other elected officials relied heavily on Twitter, Facebook, and YouTube to reach the public to inform them of threats and dangers. As a result, they were able to conduct very swift and timely evacuations (Preston &Stetler, 2012).

Recently, a growing trend has been taking place in organizations that are integrating various social media platforms into their strategies for responding to crises. These organizations place a great amount of effort in ensuring that they have the ability and knowhow to apply their usage of various social media tools to communicate with the public. Municipal governments are too often in the forefront when crises occur and people demand answers from them before anyone else. Research, which studied local governments, found that they are making use of social media platforms so as to respond to specific events and situations. The researchers found that no particular social media platform was preferred over another. Nonetheless, Twitter, Facebook and YouTube, as a group, were found to be the most relevant to those considered local governments (Preston &Stetler, 2012).

A Pew Research Poll (2013) has stated that approximately 73 percent of online users used at least one social networking site. The most popular sites were Facebook and Twitter with 70 percent making use of Facebook, and 68 percent using Twitter. Government officials said that they prefer Facebook for communicating with their citizens during a crisis (53%). Another (27%) said that they used Twitter to convey information during a crisis. Nonetheless, a sizeable (30%) of these surveyed subjects said that they did not use any social media platform for mass communication during crisis. As for those who made use of various social media platforms, an absolute majority (55%) stated that they used two platforms or one. When speaking to the

Congressional Research Service, Lindsay (2011) discussed the rampant growth of social media usage in crisis situation communication and management. He stated that having a predisposition to always being prepared to respond is vital in today's volatile world. He also considered that social media have become the fourth most sought-after source for vital information regarding a crisis communication. Social media have made it possible for cheap and rapid information exchange to and from mass audiences. In many cases, people have stated that information from social media may be an even more credible source than that from traditional mass media (Kingsley, 2010; Kuzma, 2010; Procopio&Procopio, 2007). Government officials need to make better usage of various social media tools, which are available to them and increasingly accessible by their citizens. Today's figure of a staggering one-third of government officials surveyed that are not making use of any social media platform for mass communication is unacceptable.

Many more studies have addressed the potential positive impacts of social media (Bauer, 2007; Pleil and Zerfass, 2007; Ruisinger, 2007). A variety of new risks post threats for organizations and their communication departments. Attention should be paid to the specific "dangers and methods of social engineering, common exploits, and the threats to privacy that social media present" (ISACA, 2010, p. 6).

According to Palen, Vieweg, Sutton, Liu, & Hughes (2007), on-site and on-line crisis responseactivities are becoming gradually concurrent and interwoven together. Social media have essentially made customers an integral part of crisis communication response. Furthermore, the use of social media, according to the UN global pulse white book, has been growing very rapidly. Facebook and Twitter wereused to share information andupdates: 1.during the 2007 and 2008 California wildfires, 2. 2008Mumbai massacre, 3. 2009 Iranian Presidential election and related youth revolution, 4. 2010 Haiti earthquake, 5. 2011 Fukushima nuclear accident, 6. 2011 Arab Spring in various Arab countries, 7. starting with the Tunisian uprising and mushrooming into Egyptian, Libyan, Syrian, Iraqi, and Yemeni rebellions, and other events(Beaumont, 2008; Lenhart, 2009; New America Media, 2011; Robinson, 2010; Smith, 2010b; Sutton, Palen, &Shklovski, 2008). This change is due to the prompt growth of the World Wide Web and its various applications. In many countries, public expectations and roles have been changing in terms of the desire for increased transparency of information and in the spirit of open government as well as participation in information gathering, sharing, and verification. Consequently, the public is no longer content to receive official recommendations and advice in a passive way.

Direct reporting by individuals on the scene holding nothing more than a mobile phone deliversvirtually promptnews, which then spreads quickly amongthe general public networks of contacts and friends (Stephens &Malone, 2009). New mediatechnology permitsisolated individuals to become sources of information online partaking views, understandings, practices and viewpoints with others (Marken, 2007). Consumers of information are

concurrentlyproviders ofinformation, thereby providing the basis foruser createdmedia. The news of a crisis was reaching millions of people without the intervening presence of journalists(Veil, Buehner, &Palenchar, 2011). Word of mouth news is tremendously influential and even perceived as trust-worthier than mainstream media news in some instances (Colley & Collier, 2009). It's been said that blogs, CNN I-Reporting, and a variety of social media now influence mainstream news coverage more than ever before. People are gradually shifting from the top-down communication or old model when critical information was pushed on them and made available by authorities, to a model where the information is pulled. Social media empowered them to gather fragmented information, filter huge amounts of data they access on the basis of their own interests, and share that information with whomever they think deserve it.

Wendling, Radisch, and Jacobzone (2013) identified the following five types of social media: first, social networking media such as Facebook, Myspace, which bring groups of people together because they share common interests. Second, content sharing media such as Flicker and YouTube, which allow anyone to upload content in the form of videos or pictures to be shared with other interested users. Third, collaborating knowledge sharing media such as Wikis and podcasts, which enable participants to ask questions and expect answers to come from a variety of users. Fourth, blogging social media shared facts and values, emotions and expectations. Fifth, volunteer technology communities (VTC), such as the less commonly used by the public. These diverse types of social media can be complementary in crisis communication in terms of enhancing coordination among volunteers and emergency services; content sharing or creating awareness through identifying images and videos of how a crisis is evolving in real time; developing dialogs amongst various stakeholders in a crisis management situation.

Social media guidelines describe and provide advice on how social media communication be dealt with by all members of a corporation. It can enable all of them to become communicators in participative online environments (Bell, 2010; Turner, 2010; Wright and Hinson, 2009). Boudreaux (2011, p. 274) has analyzed social media guidelines and has found them "critical to helping employees understand the boundaries of their social media activities relating to their employer." Even if a corporation does not want to engage in social media, there is a need to educate employees and formulate clear guidelines on the use of social media both, on the job and for private activities. The efficiency of business processes is at risk when employees spend too much time on social networking sites. This has led to an increasing number of firms prohibiting all social media use in the workplace (ISACA, 2010). Marfleet (2008, p. 153) describes such a procedure as "short-sighted," as it "will inevitably backfire as individuals choose to work for those corporations that support them in working in a way they want to and which encourages creativity and experimentation." Put differently, prohibitions leave many employees unsatisfied and ignore the positive aspects of engagement with social media.

Fourth, Lebanon has been enduring a political stalemate causing the longest vacancy in the presidential seat, paralysis in its Parliament, and inefficiency in its Coalition Government. The Lebanese garbage crisis started on July 17, 2015 when the Lebanese government decided to close its biggest landfill in the coastal town of Naameh. It was managed by the company called Sukleen. The residents of Naameh and its surrounding small villages have been requesting the closure of that landfill since its creation for over 16 years ago. The crisis actually blew in the face of government via many demonstrations and clashes with police, which led to interrupting traffic in the center of the capital as well as along the Lebanese major highway between Beirut and Southern Lebanon. The Lebanese garbage crisis underlined another worse crisis concerning the political system put in place in the country. It is power sharing amongst the largest religious factions (Maronite Christian president, Shiite Speaker of the Parliament, and Sunni Prime Minister). Thus, consensus is key at all levels to ensure proper relations and functioning of that system.

The Lebanese garbage crisis developed from a number of issues and reports that examined how crises might shape the selection of crisis response and examined the effect of crisis response strategies on government reputation (Bradford & Garret, 1995; Coombs, 1999a; Coombs & Holladay, 2001; Coombs & Schmidt, 2000; Coombs, 2004). The notion is to articulate a theory-based system for matching a crisis response strategy to the crisis, so to preserve the government status. The garbage crisis had to follow the use of instructing information. Instructing information conveys to stakeholders what to do to protect themselves from a crisis and what the government is doing to prevent a repeat of that crisis (Bergman, 1994; Sturges et al., 1994). Attribution theory serves as a guide for linking the crisis to response strategies (Coombs, 1995, 1998, 1999b; 2004).

There are several challenges associated with the use of social media in a crisis communication situation. First is the challenge of multiple players and communication channels. Then the transparency and reliability; damaging reputation; avoiding information overload; protecting privacy at the same time of sharing data; taking care of security issues; and informing those publics that are unfamiliar with social media or don't use them at all as well as assessing the impact of social media vis-à-vis traditional media (Wendling, Radisch, and Jacobzone, 2013).In light of the above discussion and based on attribution, diffusion of information, situational crisis communication, and uses and gratifications theories, how does the Lebanese government communicates crisis situations to its public and stakeholders?

Methodology

A qualitative survey was conducted across various Lebanese constituencies in December 2015-January 2016. Anexpedientsample that comprised 108 subjects was used in this study (64 or 59.3% were males and 44 or 40.7% were females). The questionnaire consisted of 15 questions, including the below key research queries. Each question is based on scientific hypotheses

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incorporating existing theories and previous empirical findings. In addition, the researchers scheduled a specific time with subjects who received a special invitation to participate in the study. Descriptive statistics were used to assess subjects' overall effectiveness(SOE) on a five-point scale from 1-5.A low effectiveness level was indicated by 0≤SOE<2.5, a medium level by 2.5≤SOE≤3.5, and a high level by 3.5<SOE≤5.

Moreover, the respondents were asked as to whether there are specific strategies in their corporations for initiating and using social media in business processes. In order to gain a better understanding of what has been going on in their corporations, the following dimensions were requested: knowledge of the social media landscape (KSML); knowledge of the social web etiquette (KSWE); skills in initiating web-based dialogs (SWBD); knowledge of the technical requirements for setting up social media platforms (KTRSMP); knowledge of the legal framework (KLF); information vis-à-vis the interplay between social media and traditional media--print, television, &radio--(ISMTM); experience in managing web communities (EMWC); skills in the prevalent means of expression (SPME); experience in the development of social media strategies (EDSMS); and experience in the evaluation of social media activities (EESMA). A percent value for the social media skills (P_{SMS}) was calculated for each survey participant as the average rating of the 10 individual skills in the questionnaire. The average values ranged from 0 (no experience) to 5 (professional). A low skill level was indicated by $0 \le P_{SMS} \le 2.5$, a medium skill level by $2.5 \le P_{SMS} \le 3.5$, and a high skill level by $3.5 \le P_{SMS} \le 5$. While the respondents reveal quite a good knowledge about many of these factors, their companies did not use their skills to their full potential for the benefit of the company, stakeholders, and the public at large, leading subjects to a very negative perception of their employers in general.

Supervisorystructures were operationalized using a list of the following 12 items: participative corporate culture; commitment of top management; human resources; person caringfor social media; monitoring tools; social media workshops; training; social media guidelines; strategies; key performance indicators for measuring success; specific budget; software and hardware; and a dedicated social media department. Participants were askedas to whether these items already existed in their corporations or did not exist at all. Based on subjects' responses, the percent of social media supervisory structures (P_{SMSS}) was calculated as the sum of all of the structural elements governing social media which were present in Lebanesecorporations. The percentage values ranged from 0 to 12. A weak supervisory structure was defined as $0 \le P_{SMSS} \le 4$, average as $5 \le P_{SMSS} \le 8$ and sophisticated as $9 \le P_{SMSS} \le 12$. An overall revelation of these supervisory structures were lacking for working purposes.

Research questions/hypotheses

- 1. Lebanese government lacks good knowledge and experience in conceptual approaches and strategies to social media use in crisis communication.
- 2. Supervisory frameworks for social media use are weak in most Lebanese corporations.

- 3. Transparency and trustworthiness in the public sector with regard to risk and crisis communication are mostly lacking.
- 4. The intensity of using social media for crisis communication activities is lacking.
- 5. Self-skilfulness in social media use is not lacking.
- 6. Overall effectiveness of social media uses in crisis communication activities is lacking.

Results and Discussion

Table 1 shows that 108 subjects fully completed responses (64 or 59.3% were males and 44 or 40.7% were females) and consisted of individuals who are quite informed about this current crisis. In this sample, 40.5 percent serve as heads of PR or corporate communication, 56.2 percent as PR managers or spokespeople, and 3.3 percent as trainees. The average age of subjects was 25 years old.

Table 1: Descriptive Statistics

Sex	SS (Sample Size)	Q1	Q2	Q3	Q4	Q5	Q6		
Male	64 (59.3%)54.	4%	57.6%	61.4%	63.4%6	3.4%68.3%	6		
PR H.	24.0%								
PR M.	33.3%								
Trainees	Trainees01.9%								
Female	44 (40.7%)23.9	9%	25.3%	27.0%	27.8%	27.8%	31.5%		
PR H.	16.5%								
PR M.	22.8%								
Trainees01.3%									
Private C	C. 44.7%								
Public C.45.3%									
Total	108 78	8.3%	82.9%	88.4%	91.2%	91.2%	99.8%		

Summary table of descriptive statistics concerning subjects' responses to the five research questions

Table 2 shows that very small percentages of the sample rarelyutilized social media under administered or governed use $(0 \le 1.1 < 2.50)$; also, small percentages were found to use social media for corporate needs. With the exception of the past few months during the trash crisis (from July 2015 onwards) right when the garbage crisis started; while high percentages have been reallyactive users for their personal communication activities for more than year $(3.5 < 4.5 \le 5)$. Hence, whereas individuals had been active users of social media for a variety of personal purposes, their corporations did not capitalize on their skills for governmental resolutions. Very large percentages, as can be seen under the column of personal use, indicate that they knowhow to use social media, but their employers avoided asking them to do so for professional use. They reported that their organizations had rarelyused social media for risk and crisis communication.

As to supervisory or governed use, Table 2 indicates that very few percentages of Lebanese governmental units relied on any supervisory frameworks and, as a result, their overall effect was around the one percent. The authors believe that the supervisory frameworks or governed use of social media those unitsrely on, the higher their overall effectiveness will become, which indicates a positive relationship exists between supervisory frameworks of social media and overall effect of organizations. The less the supervisory frameworks of social media use there are in those units and the less their overall effect they will have with regard to social media use for communication activities.

Table 2: Use of Social Media for Communication Activities (USMCA)

Strategies of Init	tiating				
& Using Social	-				
Media	Personal Use	Corporate Use	Governed Use	Total	
KSML	92.2%	7.1%	1.7%	100%	
KSWE	93.4%	5.2%	1.4%	100%	
SWBD	95.1%	4.6%	1.3%	100%	
KTRSMP	96.3%	3.6%	1.1%	100%	
KLF	97.5%	1.3%	1.2%	100%	
ISMTM	92.3%	5.6%	2.1%	100%	
EMWC	94.2%	3.7%	2.1%	100%	
SPME	93.7%	4.2%	2.1%	100%	
EDSMS	96.1%	2.8%	1.1%	100%	
EESMA	95.4%	3.2%	1.4%	100%	
P _{SMS Level} 3.5 < 4.5 ≤	≤ 5 0 ≤ 1.6 < 2.5	0≤1.1<2.50			
Overall Effectives	ness3.5 <soe≤5 0</soe	≤ SOE<2.5 0 ≤ SC	0E<2.5		

Based on subjects' answers, it seems that the most frequently applied tools were micro blogging (Twitter), and the most popular communities were Facebook and career-oriented social networking sites such as (LinkedIn). With regard to all social media platforms and expert PR activities, only one-fourth (1/4) of the subjects revealed high levels of activity. Organizations with more experience of using social media were likely to assess these platforms as being beneficial for corporate communication. However, most subjects have stated that Lebanese government agencies are using social media the least for risks and crisis communication purposes. They only do so under a lot of pressure from the public (demonstrations and interruption of the flow of traffic).

Furthermore, Table 3 below reveals that government agencies and units are considered lacking in transparency, carefulness, and responsibility, losing credibility and appearing extremely selfish in the eyes of the public (T=83.4%; Cred=75.8%; R=93.6%; Care=98.3%;

Self=100%). These traits are extremely important to the public at large, especially when those agencies and units keep the public in the dark when it comes to important decisions and information related to their health, safety, and avariety of other crucial matters into their lives and the lives of their children.

Variable	Q3-1=strongly agree - to - Q3-5=strongly disagree						
Q3-1Q3-2 Q3-	3 Q3-4	Q3	-5				
Transparency 83.	4%	10.6%	4.4%	1.5%	0.0	%99.9%	
Credibility75.8%	1	4.7%	8.3%	1.2%	0.0%	100%	
Responsibility	93.6%	06	.1%	0.3%	0.0%	0.0%	100%
Carefulness	98.3%	01.	7%	0.0%	0.0%	0.0%	100%
Selfishness	100.0%	0	.0%	0.0%	0.0%	0.0%	100%

Table 3: Major Corporate Characteristics

As the Lebanese Prime Minister Tammam Salam stated: It was "the straw that broke the camel's back," when he was trying to express support for the nationwide protests against his own government, which has had failed miserably for months to collect mountains of trash in the streets of the capital, Beirut. Although it was a bizarre but revealing statement. That rubbish crisis has become a potent symbol of the political corruption protesters blame, not only for the rubbish crisis, but also for the gridlocked sectarian power system unable to meet its citizens' most basic needs, from electricity, to water, health to education, and you name it! Lebanon's politicians are either strikingly unaware to their own shortcomings or, maybe worse, incredibly skilled at evading accountability for any of the nation's calamities. Only half of the people in Lebanon are connected to water provisions; only a small minority gets full electricity coverage and the rest are on stringent power allocation, either they have been using oil lamps, or live in the dark, as was the case in the old ages about sixty years back. More than a third of Lebanese youths are unemployed and public education is their surest pathway to long-term joblessness. Government healthcare is a death wish, expensive, and a must.Beirut 'Nahr el-Mout' or River of Death was on CNN full of trash. It has actually become a true river of death for many passers-by. In short, corruption of Lebanese governmental units has been at its best and leading into one crisis after the other, which are actually rendering the country inefficient, at the brink of collapsing, and with a very bad reputation worldwide.

Even though the incorporation rates of social media were quite normal for a developing nation such as Lebanon, respondents evaluated their own social media skills to be quite low (30.4 percent) or medium (40.7 percent), as was expected. However, respondents have shown high self-ratings in the areas of responsibility and carefulness in comparison with corporate traits. This supports the authors' expectations. The main obstacles within the range of abilities needed for effective social media communication consist in the lack of technicalities, knowledge, and experience of conceptual approaches to social media. This lack of expertise comes into play

whenever evaluating the risks of social media. With regard to these risks, the majority (66.2%) of the respondents mentioned the loss of control of communication processes and 64.1 percent have stressed the need for quick reactions. Lebanese corporations and mainly government agencies lacked the knowhow and failed to react in times of emergencies and crisis communication. The government was fully aware that after July 17, 2015 the Naameh garbagedumping site will no longer be used for getting rid of trash; however, they did not react to the forthcoming crisis and let it fester slowly till it became a major political crisis.

Variable Q5-1 strongly agree - to - Q5-5=strongly disagree Total								
	Q3-1	Q3-2	Q3-3Q3-4	Q3-5				
Skillful	30.4%	40.7%	14.4%	10.6%	3.9%	100%		
Competent	35.8%	39.7%	16.3%	5.2% 2.9	% 99.9	9%		
Responsible	93.6%	06.1%	0.3 0.0%	0.0%100)%			
Careful	98.3%	01.7%	0.0%	0.0%	6 100%			
Risk assumpt	ion66.2%20.	.3% 1	1.4% 2	1% 0.0%	100%			
Quick reactio	n 64.1%	22.6%	13.2%	0.0%	0.0%	99.9%		

Table 4: Respondents Self-Rating on Related Traits

Shortfalls were found in the areas of social media skills and competency of respondents, while they acknowledged that they feel more responsible, careful, and quickly to react for the sake of the public good, contrary to politicians and public employees in government agencies, as expected. Only 30.4 percent of all subjects indicated that they are skillful and 35.8 percent perceive themselves as competent. However, they rated themselves high in terms of being responsible, careful, assuming risk, and quick to react in emergencies and crisis situations. This coincided with the lack of structural prerequisites for strategic planning in almost all of the companies. Only a tiny minority of agencies or companies had established a specific social media department in the country to take care of crises; and whenever established, these departments had little authority: only one-third of these departments were responsible for the development of strategies and had sovereignty over their budget whenever it existed.

Equally important, the establishment of regulatory structures and governed use of social media were almost lacking, as is shown in tables 1 and 2 above. More specifically, there was a deficiency in terms of key performance indicators. For instance, the country did not have a budget for many years and spending has been following a specific rule, which is not normal at all. This leads to lacking a good budget for the effective use of social media in almost all governmental units in the country. In addition, Lebanese governmental units lack social media guidelines, professional development opportunities such as seminars and training courses, and staff resources. Managerial commitment and a participative corporate culture, were reported one in three agencies. The resources needed for social media communications were lacking in most governmental organizations.

Recommendations and Guidelines for effective Communication in Crisis situations

- 1. Acknowledge that a crisis exists as quickly as possible. Before any effective instructions and feedback can occur, the crisis must be identified and well defined. The best example we can acknowledge here comes from the Johnson and Johnson Tylenol incidence in Chicago, USA in 1982, wherein the company was faced with a sudden crisis and had to face traditional media (social media and mobile phones did not exist at that time) and the public at large. The company's chairman, James Burke, formed a seven-member strategy team that, under his guidance, reacted to see how they could protect the people first and foremost and how to protect the product second(Knight, 1982). This crucial guideline is usually ignored by the Lebanese authorities.
- 2. **Crisis Management Procedures should be communicated to senior officers.** The initiation of most urgent communication should follow a top-down approach. Thus, those who have identified the crisis should have a set of procedures specific to handling the situation (Robinson, 2010). That is what they did inthe abovementioned Tylenol case. Itwas not done in the Lebanese case.
- 3. **Initial communication to the public is a must.** Senior officials should inform the public, to the greatest extent possible, about the situation, which the organization is facing, and how they plan to tackle it. In order to be successful, the Public Relations (PR) department takes care of this step of the crisis situation via using social as well as traditional media to tell the truth, and nothing else but the truth, to the public at large so as to be perceived trustworthy and believable. As could be seen from the results of this study, the Lebanese government ignored this guideline completely and pretended as if there was no crisis whatsoever.
- 4. **Communication to Specific/Stratified groups.** The officials should be ready to communicate specific courses of action, whichshould be taken by particular subgroups. These actions can be preventative, corrective, or deterrent in nature. The group, as a whole, usually should not know about the sensitive details of such actions. Rather, they should be informed of the aim and level of success following the event. This is another crucial guideline, that the Lebanese government did not consider as important at all.
- 5. Management/Government should establish channels for feedback. These channels are useful for getting to know the effectiveness of the measures taken to respond to the crisis. Social media can play a vital role here. This is because social media are widely available to anyone with access to the Internet (Wright & Hinson,

- 2009). Lebanese government's feedback constituted lies after lies, which led the public to not trust their officials.
- 6. Management/Government should review the status quo and communicate with honesty, candour, and transparency. All stakeholders, especially those who have made effort to respond to crisis, have a right to know the facts as soon as they can be revealed to the public. The Management/Government should be honest, in the sense that it will not give false-causes for optimism. If there is negative news, which the Management/Government needs to convey, they should show a Plan B, which will be used as a result of the shortcoming. The Plan B should be constructed in strong partnership with credible sources. These experts are, preferably, technocrats; or, in the case of a firm, outsiders. This makes it easier to find people who are specialists in the particular field needed to give advice. Furthermore, this ensures consistent messages without bias or conflicting interests (Robinson, 2010). This was not the case with the Lebanese government at all.
- 7. Media, specifically social media, must be highly considered and well upheld. This means that all media outlets and inlets should be taken care of and readily accessible to all who wish to use them. This helps comfort all parties involved andmanagement/Government should review the status quo and communicate with honesty, candour, and transparency. They should allow people to express their opinions freely and openly. History has shown that the suppression of free speech can work only for a limited period of time and, most of the time, it is likely to backfire or have a boomerang effect.
- 8. Those in charge should be ready to accept any dramatic and sudden changes in events. A normal consequence of responding to crises are events that occur subsequently which were not planned. In essence, those responding to a crisis should be ready to 'expect the unexpected' (Veil, Buehner, & Palenchar, 2011). The Lebanese government did not even consider the possibility of dramatic and sudden demonstrations in several parts of the capita, Beirut, and in front of so many agencies.
- 9. The management/government should assure the public that they are at or working towards self-efficacy. Management/government officials need to show the public that they have things under control. This helps to assure the public that their efforts to combating the crisis are well persevered and will be built-upon in the future. Lebanese government officials didn't actually have things under control and whenever they tried to assure the public of that control, they were purely deceiving them and exacerbating the problem or crisis further.

Limitations and future research

Since this study has a relatively small sample size and was mostly carried outside Lebanon, the results cannot be considered as being representative of the entire Lebanese population, especially with regard to dissimilar volumes of social media use in that society and its various

E-Leader Vienna 2016

organizations. While the overall trend shows here what has been going on in the country for some time, it is not essentially to be questioned in its validity and applicability to the nation's politicians; however, it would be more rigorous to further test it with a much larger sample size. It would be particularly interesting to draw a comparison between subjects with higher rates of social media use and those with lower levels of usage, as is the case in Lebanon, one of the developing countries.

Another possible limitation of this study could be that the survey was conducted person and via surrogates. In addition, it was not based on a random sample. Therefore, many potential subjects may have been completely excluded from being sampled in this form of survey. This is very important and may have provided an added value to our investigation of this crucial topic. As a result, the level of experience of social media reported in this study could be even lower or higher in the overall population of Lebanon.

One element that could bestudied in more detail is the understanding of social media approaches. The results of this study demonstrate that many respondents claim that the nation's government workers do not have specific plans or strategies to deal with any emergent crises, and yet hardly any of the prerequisites for such planshad been implemented. Hence, the effectiveness of such strategies, if and when they exist, is questionable. Even though qualitative research approaches can assisting athering more information concerning social perception of social media governance and crisis communication, still those approaches fall short of specific data regarding implementation techniques and procedures that are followed by government officials. Therefore, more research could be conducted concerning those techniques and the employees in charge of implementing them.

This study has focused on a new aspect of research in the survey methodology. The initial results were given. However, this study should be replicated in order to get a clearer picture of the connectivity between the different elements of the Lebanese society. One can gauge those general trends, which may be indicative and may support our research findings.

Conclusion

In conclusion, the authors discussed the issue of using social media platforms in governance and crisis communication. They tried to analyze the current Lebanese trash crisis, its causes, and lack of finding a solution to it. Lack of proper handling of that crisis goes back to political bickering and corruption based on promoting business interests affiliated to them. Political maneuvering over whose company is going to win this lucrative contract has been sustaining government inaction and quick reaction to the country's major crisis ever. An extensive literature review provided them with valuable information concerning that use. While a great majority of Lebanese government officials made ineffective use of social media platforms and admit that outside corporates have benefited immensely from that use. They continue to

quarreland subject their own people to misery. They appear to belagging behind due to either laziness or lack of 'know how'. It is deplorable.

Using social media for a variety of purposes has proved to be very beneficial to individuals, small groups/committees, firms, and ultimately local governmental entities everywhere in developed and many developing countries, except in Lebanon. Therefore, based on this research paper, the authors recommend that more research surveying many more national government employees and corporations on the issue of using social media platforms, mainly during crisis communication, and the effect of that use on governance as well as the public at large must be conducted. This kind of research, in and of itself, would add clarity to this very important and timely issue with regard to crisis and governance communication, especially in a nation such as Lebanon. It may also shed some light on the particular problems, which some employees are facing with that use. Finally, the authors like to conclude with what Coombs (2014) stated: while crises start as bad risks, effective crises supervision can diminish the harm emanating from them and, in some cases, allow corporations to emerge sturdier than before those crises. Nonetheless, crises are not sublime to improve corporations. As no corporation is protectedor immune from crises, hence, all must do their best to plan for at least one.

References

- Avery, E. J., & Graham, M.W. (2013). Political public relations and the promotion of participatory, transparent government through social media. *International Journal of Strategic Communication*, 7(4), 274–291.
- Barton, L. (2001). Crisis in organizations II (2nded.). Cincinnati, OH: Divisions South-Western.
- Bauer, H.H. (2007). Interactive marketing in Web 2.0+. Konzepte und Anwendungenfüreinerfolgreiches Marketing management in Internet. *Interactive Marketing in the Web* 2.0. Vahlen, München.
- Beaumont, C. (2008). *Mumbai attacks: Twitter and Flickr used to break news*. Retrieved june 31, 2015, from http://www.telegraph.co.uk/news/worldnews/asia/india/3530640/Mumbai-attacks-Twitter-and-Flickr-used-to-break-news-Bombay-India.html
- Bell, J. (2010). Clearing the AIR. Communication World, 27(10), 27-30.
- Bergman, E. (1994). Crisis? What crisis? Communication World, 11(4), 9-13.
- Bertot, J. C., Jaeger, P. T., & Grimes, J. M. (2010). Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruptiontools for societies. *Government Information Quarterly*, 27(3), 264–271.
- Bertot, J. C., Jaeger, P., Munson, S., &Glaisyer, T. (2010). Social media technology and government transparency. *IEEE Computer Society*, 11(43), 53–59.
- Bertot, J. C., & Jarger, P. (2010). Designing, implementing, and evaluating user-centered and citizencentered e-government. *International Journal of ElectronicGovernment Research*, 6(2), 1–17.
- Bonson, E., Torres, L., Royo, S., & Flores, F. (2012). Local e-government 2.0: Social media and corporate transparency in municipalities. *Government Information Quarterly*, 29(2), 123–132.
- Boudreaux, C. (2011). Social media policies. In N. Smith & R. Wollan (Ed), *The social Media management handbook* (pp. 274-285). John Wiley & Sons: Hoboken, NJ.

- Bradford, J. L., & Garrett, D. E. (1995). The effectiveness of corporate communicative responses to accusations of unethical behavior. *Journal of Business Ethics*, *14*, 875-892.
- Chang, A. M., &Kanan, P. K. (2008). *Leveraging web 2.0 in government*. Retrieved December 16, 2015, from http://www.businessofgovernment.org/sites/default/files/Leveraging/Web.pdf
- Coombs, W. T. (1995). Choosing the right words: The development of guidelines for the selection of the "appropriate" crisis response strategies. *Management Communication Quarterly*, 8, 447-478.
- Coombs, W. T. (1998). An analytic framework for crisis situations: Better responses from a better understanding of the situation. *Journal of Public Relations Research*, 10, 177-191.
- Coombs, W. T. (1999a). information and compassion in crisis responses: A test of their effects. *Journal of Public Relations Research*, 11, 125-142.
- Coombs, W. T. (1999b). *Ongoing crisis communication: Planning, managing, and responding*. Thousand Oaks, CA: Sage.
- Coombs, W. T., & Holladay (2001). An extended examination of the crisis situation: A fusion of the relational management and symbolic approaches. *Journal of Public Relations Research*, 13, 321-340.
- Coombs, W. T., & Schmidt, L. (2000). An empirical analysis of image restoration: Texaco's racism crisis. *Journal of Public Relations Research*, 12, 163-178.
- Coombs, W. T. (2004). Impact of past crises on current crisis communication: Insights from situational crisis communication theory. *Journal of Business Communication*, 41(3), 265-289.
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10(3), 163–177.
- Coombs, W. T. (2014). *Crisis management and communications. Institute for Public Relations* (IPR). Retrieved March 5, 2016, from instituteforpr.org
- Colley, K.L., & Collier, A. (2009). An overlooked social media tool? Making a case for Wikis. *Public Relations Strategist*, pp. 34–35.
- Derner, P. (2013 July). *The NTSB utilizes social media during Asiana 214 investigation*. Retrieved January 23, 2016, from http://www.nycaviation.com
- Dorris, M. (2008). Service transformation in government. The Public Manager, 36(4), 25–28.
- Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the U.S. Congress. *Journal of the American Society for Information Science and Technology*, 61(8),1612–1621.
- Graham, M., & Avery, E. (2013). Government public relations and social media: An analysis of the perceptions and trends of social media use at the localgovernment level. *Public Relations Journal*, 7, 1–21.
- Graham, M. W., Avery, E. J., & Park, S. (2015). The role of social media in local government crisis communications. *Public Relations Review*.
- Hopt, K.J. (1998). *Comparative corporate governance: The state of the art and emerging research.* Oxford University Press, Oxford.
- ISACA (2010). Social media: business benefits and security, governance and assurance perspectives. *Emerging Technology White Paper, ISACA*. Retrieved January 30, 2016, fromwww.isaca.org/Knowledge-Center/Research/Research/Deliverables/Pages/Social-Media-B usiness-Benefits-and-Security-Governance-and-Assurance-Perspectives.aspx
- Kingsley, C. (March 2010). *Making the most of social media: 7 lessons from successful cities*. Retrieved January 18, 2016, from www.fels.upenn.edu/files/PP3 SocialMedia.pdf

- Knight, J. (October 11, 1982). Tylenol's maker shows how to respond to crisis. *The Washington Post*. p. WB1.
- Kooiman, J. (2007). Governing as governance. Sage, London.
- Kuzma, J. (2010). Asian government usage of web 2.0 social media. *European Journal e-Practice*, 9, 1–13.
- Lenhart, P. (2009), Twitter-pated: Mobile Americans increasingly take to tweeting. *Pew Research Center Publications*. Retrieved February 12, 2016, from: http://www.pewresearch.org/pubs/1117/twitter-tweet-users-demographics
- Lindsay, B. R. (2011). Social media and disasters: Current uses, future options, and policy considerations. Retrieved January 15, 2016, from http://www.fas.org/sgp/crs/homesec/R41987.pdf
- Linke, A. &Zerfass, A. (2013). Social media governance: Regulatory frameworks for successful online communications. *Journal of Communication Management, Vol. 17*(3), 270 286.
- Marfleet, J. (2008). Enterprise 2.0. What's your game plan? *Business Information Review*, 25(3), 152-157.
- Marken, G.A. (2007). Social media . . . the hunted can become the hunter. *Public Relations Quarterly*, 52(4), 9–12.
- McAuley, E., Duncan, T. E., & Russell, D. W. (1992). Measuring causal attributions: The revised causal dimension scale (CDII). *Personality and Social Psychology Bulletin*, *18*, 566-573.
- New America Media (2011). Social media made Tunisian uprising possible. *New America Media*. Retrieved january 30, 2016, from http://newamericamedia.org/2011/01/social-media-made-tunisian-uprising-possible.php (accessed 25 June 2015).
- Organization for Economic Co-operation and Development (OECD, 2003& 2011). Retrieved February 29, 2016, from *oecd-library.org*.
- Palen, L., Vieweg, S., Sutton, J., Liu, S.B., & Hughes, A. (2007). Crisis informatics: Studying crisis in a networked world. *Third International Conference on e-Social Science*, Ann Arbor, MI, October. Retrieved February 16, 2016, from http://ess.si.umich.edu/papers/paper172.pdf
- Pew Research. (2013). *Social networking use*. Retrieved December 15, 2015, from http://www.pewresearch.org/ data-trend/ media-and-technology/social-networking-use/
- Pleil, T. &Zerfass, A. (2007). Internet and social software in Internet and social software in corporate communications, in *Piwinger, M. &Zerfass, A. Eds. Handbook of Corporate Communications*. Gabler, Wiesbaden, pp. 511-534.
- Preston, J., &Stetler, B. (2012 November). How government officials are using Twitter for Hurricane Sandy. *The New York Times*. Retrieved February 29, 2016, from http://thelede.blogs.nytimes.com/2012/11/02/how-government-officials-used-twitter-for-hurricane-sandy/
- Procopio, C. H., & Procopio, S. T. (2007). Do you know what it means to miss New Orleans? Internet communication, geographic community, and socialcapital in crisis. *Journal of Applied Communication Research*, 35(1), 67–87.
- Robinson, E. (2010). Following the earthquake in Haiti on Twitter. *Washington Post*, retrieved February 29, 2016, from
- http://voices.washingtonpost.com/postpartisan/2010/01/following_the_earthquake_in_ha.html Ruggiero, T. E. (2000 & online version: 17 Nov. 2009). Uses and gratifications theory in the 21st Century. *Mass Communication and Society*, 3(1), 3-37.
- Ruisinger, D. (2007). *Online relations: Guidelines for modern public relation on the Web*.Schäffer-Poeschel, Stuttgart.

- Smith, A. (2011). *Why Americans use social media*. Retrieved February 15, 2016, from http://www.pewinternet.org/2011/11/15/why-americans-use-social-media/
- Smith, A. (2010a). Government online: The Internet gives citizens new paths to government services and information. *Pew Internet & American Life Project*, Washington, DC.
- Smith, B.G. (2010b). Socially distributing public relations: Twitter, Haiti, and interactivity in social media. *Public Relations Review*, 36(4), 329–335.
- Sohn, Y. J., & Lariscy, R. W. (2014). Understanding reputational crisis: Definition, properties, and consequences. *Journal of Public Relations Research*, 26(1), 23-43.
- Stephens, K.K., & Malone, P.C. (2009). If organizations won't give us information: The use of multiple new media in crisis technical translation and dialogue. *Journal of Public Relations Research*, 21(2), 229–239.
- Sturges, D. L., Carrell, B., Jr., Newsom, D., & Barrera, M. (1994). Crisis communication: Knowing how is good; knowing why is essential. In M. B. Goodman (Ed.), *Corporate communication: Theory and practice* (pp. 339-353). Albany: State University of New York Press.
- Sutton, J., Palen, L., &Shklovski, I. (2008). Backchannels on the front lines: Emergent uses of social media in the 2007 Southern California Wildfires. *Proceedings of the 5th International ISCRAM Conference*, May, Washington, DC, pp. 1–9.
- Tricker, B. (2009). *Corporate governance: Principles, policies, and practices*. Oxford University Press, Oxford.
- Tufekci, Z., & Wilson, C. (2012). Social media and the decision to participate in political protest: Observations from Tahrir Square. *Journal of Communication*,62(2), 363-379.
- Turner, R. (2010). The dawn of a new approach to security. Computer Fraud & Security, 15(4), 15-17.
- Van Kersbergen, K. & Van Waarden, F. (2004). Governance' as a bridge between disciplines: Cross-disciplinary inspiration regarding shifts in governance and problems of governability, accountability and legitimacy. *European Journal of Political Research*, 43(2), 143-171.
- Veil, S. R., Buehner, T., &Palenchar, M. J. (2011). A work-in-process literature review: Incorporating social media in risk and crisis communication. *Journal of Contingencies and Crisis Management*, 19(2), 110-122.
- Weiner, B. (1985a). An attributional theory of achievement motivation and emotion. *Psychology Review*, 92, 548-573.
- Weiner, B. (1985b). Human motivation. New York: Springer-Verlag.
- Weiner, B. (1995). *Judgments of responsibility: A foundation for a theory of social conduct*. New York: Guilford.
- Weiner, B., Perry, R. P., & Magnusson, J. (1988). An attribution analysis of reactions to stigmas. *Journal of Personality and Social Psychology*, 55, 738-748.
- Wendling, C. J., Radisch, J., & Jacobzone, S. (2013). The use of social media in risk and crisis communication. *OECD Working Papers on Public Governance* (24), OECD Publishing.
- Wright, D.K. & Hinson, M.D. (2009). Examining how public relations practitioners actually are using social media. *Public Relations Journal*, *3*(3), 2–32.