

Article

## The Role of Media and Communication in Reducing Uncertainty During the Syria War

Claudia Kozman, Rana Tabbara and Jad Melki \*

Department of Communication Arts, Institute of Media Research and Training, Lebanese American University, Lebanon;  
E-Mails: [claudia.kozman@lau.edu.lb](mailto:claudia.kozman@lau.edu.lb) (C.K.), [rana.tabbara01@lau.edu](mailto:rana.tabbara01@lau.edu) (R.T.), [jmelki@lau.edu.lb](mailto:jmelki@lau.edu.lb) (J.M.)

\* Corresponding author

Submitted: 8 April 2021 | Accepted: 21 June 2021 | Published: 17 December 2021

### Abstract

Ten years after the uprising in Syria, millions of its citizens remain displaced and uncertain about their fate. Throughout that period, media coverage about the ensuing civil war played a major role in informing Syrians and contributed to altering their levels of fear and anxiety about their country's future and their survival prospects. This study examined the role of legacy media, online media, and interpersonal communication in increasing or reducing uncertainty among displaced and non-displaced Syrians. Through a revised construct of uncertainty reduction theory within the context of a civil war, we assessed the relationship between exposure to these media sources and feeling anxious, uncertain, angry, and in danger, and whether these feelings influenced information consumption trends. We also probed the connection between their anxiety levels and sharing information, both interpersonally and on social media. The study surveyed 2,192 Syrian adults (95% CI,  $\pm 2.5$ ) living in Syria, Lebanon, Jordan, and Turkey, both inside and outside refugee camps, using a random multi-stage cluster sampling technique. The findings revealed a strong relationship between positive emotions and time spent on legacy and online media. The more secure, proud, and hopeful people felt, the more likely they were to spend time on media sources. This relationship, however, was moderated by the perceived importance of these sources. Feelings of pride, security, and hopefulness generated by television and online media correlated with the time people spent on these media sources, and the perceived importance of such media further strengthened this relationship. A different picture appeared in the relationship between positive emotions and interpersonal communication, where the perceived importance of talking to people not only significantly moderated the relationship but also canceled out the main effect of positive emotions on the time people spend communicating with others. The findings also indicated that feelings of uncertainty about these sources may stand in the way of sharing information about the war on social media.

### Keywords

Arab media; crisis communication; media and war; media exposure; media literacy; uncertainty reduction

### Issue

This article is part of the issue “Ten Years after the Arab Uprisings: Beyond Media and Liberation,” edited by Hanan Badr (Gulf University for Science and Technology, Kuwait) and Lena-Maria Möller (Max Planck Institute for Comparative and International Private Law, Germany).

© 2021 by the authors; licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

### 1. Introduction

The uprisings that took the Arab region by storm in 2011 quickly reached Syria and unraveled what was the beginning of years of strife between the government and its opposers. Faced with life-changing instances, the Syrian people strove to make sense of the traumatizing context,

seeking to reduce the uncertainty that is bound to accompany distressful times. Considered as the fuel that drives information seeking, uncertainty arguably motivated people to obtain such information through interpersonal and mediated sources (Baxter & Wilmot, 1984). Responses to political and social changes, however, are bound to vary depending on individuals' coping mechanisms and

experiences (Boyle et al., 2004). Although not all Syrians have undergone life-threatening circumstances, when a nationwide conflict occurs, most civilians experience the war through the media (Boyle et al., 2004). Nevertheless, this indirect mediated experience of the crisis could generate honest emotions (Smith et al., 2001).

However, research is yet to explore how individuals' emotions during wartime shape their media behavior. To fill this gap in the literature, this study examines negative and positive emotions concerning information pursuit during wartime through the Uncertainty Reduction Theory (URT). It also tests whether uncertainty about media and interpersonal communication sources is related to individuals' sharing of information on social media. Given the profusion of news and information dissemination from both citizens and the government (Powers & O'Loughlin, 2015), making Syria history's "most digitally documented war" (Lynch et al., 2014), the country serves as an ideal case to examine the relationship between uncertainty reduction and media exposure during wartime.

Assessing the Syrian people's coping mechanisms through the media—whether it is for survival, defiance, or uncertainty reduction during the height of the war—further allows us to build on URT and its applicability beyond its traditional contexts. Initially established to research interpersonal communication, URT has been primarily used in relationship, workplace, and health communication studies. However, we contend that the logic of the theory can also be applied to media research, as it was successfully adopted in research related to political candidacy (Pfau et al., 1997) and media coverage of distressing events, such as space shuttle crashes, the 9/11 terrorist attacks, and hurricanes (Boyle et al., 2004; Kubey & Peluso, 1990; Procopio & Procopio, 2007). The significance of this study rests upon its contribution to the extant literature in two ways: it introduces war as a new context area in URT, and it provides insight into how citizens in war-torn countries use media as a form of survival that reduces their negative emotions.

The study encompassed a survey of 2,192 Syrians living in Syria and displaced in the three neighboring countries: Lebanon, Jordan, and Turkey. The data were collected in 2014, a year that marked the peak of uncertainty in Syria. During that year, Syria witnessed the highest death toll (76,268 killed), a surge in the numbers of displaced people ("Syria conflict," 2015), and the rise of Islamist groups—such as the Islamic State in Iraq and Syria (ISIS; Melki & Jabado, 2016).

## 2. Theoretical Framework

### 2.1. Uncertainty Reduction Theory

Social psychologists have employed social identity theory to understand intergroup relations, at the core of which are two individual-level motivations (Reid & Hogg, 2005): Tajfel and Turner's (1979) self-enhancement motive that

people use "to maintain or enhance their self-esteem" (p. 40) and Hogg's (2000) uncertainty reduction, "an epistemic motive that reflects a need for meaning, knowledge, and understanding of self and the social world" (Reid & Hogg, 2005, p. 804). Scholars have agreed that uncertainty is a basic human condition, and subsequently, the management of uncertainty, a basic human activity (Goldsmith, 2001). People's need to feel certain about their environment is important since it gives them the confidence to know how to act and what to expect from their surroundings (Hogg, 2000). As such, uncertainty is a negative feeling (Fiske & Taylor, 1991; Neuberger & Silk, 2016) because it is associated with reduced control (Hogg, 2000). The theoretical framework that has informed this line of research is Berger and Calabrese's (1975) URT. Although URT was initially "proposed to explain how people manage uncertainty in initial interactions" (Stefanone et al., 2013, p. 62), media scholars adapted it to mediated situations, making it "an important motivational construct for communication theories" (Hogg, 2000, p. 228). Their conviction is based on one of the seven axioms that Berger and Calabrese (1975, p. 103) devised as constructs of URT, and which states, "high levels of uncertainty cause increases in information-seeking behavior. As uncertainty levels decline, information-seeking behavior decreases."

The literature on uncertainty reduction, however, has been fraught with competing stances and alternatives, which mainly stem from communication scholars' interest in explaining the information-seeking process (Afifi & Weiner, 2004). Most research in this area has lamented the narrow scope of the theory (Bradac, 2001), contending that uncertainty reduction is not the only solution people seek (Brashers, 2001) and that experiencing uncertainty is not necessarily an uncomfortable situation they need to diminish (Brashers et al., 2000). While it is probable that people might want to reduce anxiety for proper decision-making, others might seek to increase uncertainty (Brashers et al., 2000; Ford et al., 1996) or simply maintain it as a form of optimism or hope (Brashers, 2001). In essence, uncertainty management theory argues that people experiencing uncertainty sometimes avoid information instead of seeking it if they perceive the information to be overwhelming or difficult to accept (Brashers, 2001), as in the case of health communication (Lerman et al., 1999). Other contentious stances that have challenged URT have centered on the predicted outcome value theory, which suggests the goal of individuals in initial interactions is to maximize relational outcomes and not necessarily to reduce uncertainty (Sunnafrank, 1986), as well as the URT's presumed role of motivation in uncertainty reduction (Kellermann & Reynolds, 1990).

### 2.2. Uncertainty Reduction Theory: Role of Motivation and Affect

In the original conceptualization of the theory, Berger and Calabrese (1975) contended that the level of

uncertainty, by itself, serves as a determinant of various communication behaviors. Although people might naturally try to explore what they do not know, this rationale, Kellermann and Reynolds (1990, p. 67) argue, “assumes that persons *want* to acquire the information.” Integrating the concept of motivation to reduce uncertainty within the axioms of URT, Kellermann and Reynolds (1990) found that concern for uncertainty reduction—and not level of uncertainty—to be a critical determinant of information-seeking behavior. In other words, lack of knowledge is not enough for someone to seek information, but how much one *wants* to know is what carries the person to obtain knowledge. The “desire to obtain information,” Lachlan et al. (2009, p. 102) contend, significantly increases to “understand the situation and take appropriate actions.” Applying this rationale to a wartime situation supports the idea that in times of danger, people would want to know what is going on around them and would thus seek information.

Factoring in the role of affect could provide us with more information about the willingness to reduce uncertainty during crises and conflict situations. Although Berger and Calabrese’s (1975) model for URT views uncertainty in terms of cognition, others have explained the role of negative emotions in uncertainty reduction. Nabi (2003) found that when emotions are induced, people become guided by relevant actions in the process of acquiring information. For instance, they might abstain from seeking knowledge if such actions “reveal bad news, heighten vulnerability, threaten identities, incite feelings of hurt, and/or damage relationships” (Knobloch, 2015, p. 11). Within the context of political communication, in general, and political judgments, in particular, research on emotions has revealed the nuanced effects different emotions have on people (Huddy et al., 2005). According to Marcus et al.’s (2000) theory of affective intelligence, anxiety is positively related to political interest and could encourage people to seek out political information. Anxiety and threat, two negative emotions, were also found to be heightened when people are exposed to terror, with anxiety leading to risk aversion and threat leading to retaliation (Huddy et al., 2005). Perceiving a situation as susceptible is yet another instance that causes anxiety in people while perceiving a situation as severe leads to fear (So et al., 2016). Taken together, the complexity of the above findings further highlights the significance of measuring the role of emotions in media consumption during crises.

Other studies found people who reported experiencing strong emotional reactions to bad news, such as the case of the 1986 explosion of the Challenger space shuttle, were more likely than others to spend more time following TV news and talking to others (Kubey & Peluso, 1990) or share information about the event (Riffe & Stovall, 1989). Affect was also found to drive interest in gathering information during turmoil, particularly during the 9/11 attacks where people who experienced negative emotions exerted more effort to learn

about the attacks by seeking the media for information (Boyle et al., 2004). Studying the same context, Lachlan et al. (2009) contended that people who were suffering from negative emotions may have sought the media to reduce stress, considering those individuals who spent more time on media believed them to be useful, and might thus believe they would make them feel better.

Based on the reviewed studies, it seems plausible that individuals who want to reduce uncertainty tend to seek information from outside sources (media and people). If these sources cause negative feelings, they will avoid them, and vice versa. The first set of hypotheses tests this assumption about media sources and interpersonal relationships:

H1a: The more negative emotions individuals attribute to the media they follow, the less they will seek them for information.

H1b: The more negative emotions individuals attributed to talking to others, the less they will seek them for information.

While people in a conflict situation are expected to experience negative emotions, such as hopelessness, anxiety, and uncertainty, war might also stimulate positive emotions. The media and/or interpersonal relationships may bring people together to create a sense of community, inspiring pride and security in the efforts to overcome the conflict (Boyle et al., 2004). The second set of hypotheses tests the correlation between positive emotions and media uses and interpersonal relationships:

H2a: The more positive emotions individuals attribute to the media they follow, the more they will seek them for information.

H2b: The more positive emotions individuals attribute to talking to others, the more they will seek them for information.

For a more direct test of uncertainty and its relation to information-seeking, we pose the following research questions:

RQ1a: Is higher uncertainty about media related to less media exposure?

RQ1b: Is higher uncertainty in talking to people related to less time talking to them?

### 2.3. *Involvement, Information-Seeking, and Media Usefulness*

The importance of information access is fortified during times of war, especially for those directly involved. During crises, people resort to easy-to-reach communication channels to gather information. However, if these

channels were deemed insufficient, people would turn to other sources and/or resort to official sources (Stiegler et al., 2011). In such situations, people are willing to use any available media channel for information retrieval. This allows them to be aware of urgent events, trace family, and reduce uncertainties (Stiegler et al., 2011).

Several models have established the reasons behind individuals' information-seeking behaviors. Developed by Griffin et al. (1999) and supported by Kahlor (2007), the risk information seeking and processing model explains that people tend to acquire and process information based on the following characteristics: information gathering capacity, potential hazards, beliefs, emotional response, and perceived usefulness of the information. Moreover, research on cognitive involvement has revealed involvement and uncertainty to motivate information acquisition (Heath & Gay, 1997). Studies show that highly involved people will actively seek out information and apply strategic tactics to obtain information that would help them develop a stronger base about a particular topic (Aldoory & Austin, 2011). Involvement, in this sense, could equate to Kellermann and Reynolds' (1990) concern for uncertainty reduction. Stated differently, those who are concerned about reducing their uncertainty, that is those who *want* to know, are those who are involved enough to seek information. Considering that people in unstable situations tend to be more attentive to information that could potentially help them cope with their situation (Driskill & Goldstein, 1986), we can expect Syrians to be highly involved in their wellbeing. Thus, they want to know about the situation they are in, and in turn would be more attentive to information about the war.

People highly involved in an issue and who perceive their self-interest to be at risk not only seek information (Grunig, 1997; Heath & Gay, 1997) but also gravitate toward more authoritative media and interpersonal sources (Heath & Gay, 1997; Heath et al., 1995). Here, it is important to understand the role of credibility and usefulness of the source. Goldsmith (2001) argued that Berger and Calabrese's (1975) original model of URT did not consider "the quality of information-seeking behavior and the quality of the information obtained" (p. 518). This suggests that how respondents perceive the media's importance in fulfilling their information-seeking behavior would influence whether they would choose these media to reduce their uncertainty. Neuberger and Silk (2016) also reveal that uncertainty alone does not motivate people to seek information, but rather the perception that the information would be of value is the prime motivator to obtain information. This idea gains traction when we consider that time spent on media is positively related to people's perception of these media's usefulness, indicating people believe these sources could make them feel better (Lachlan et al., 2009). Syrian citizens, however, relied on additional factors to gauge media importance, depending on their perception of the conflict (Kozman & Melki, 2018; Melki & Kozman, 2021).

Based on this rationale, we posit that the process of seeking media for information to reduce uncertainty is moderated by individuals' perceived ability of the media to help. Hence, the following hypotheses emerge:

H3a: The relationship between positive emotions and media exposure is moderated by the perceived importance of the media.

H3b: The relationship between positive emotions and talking to people is moderated by the perceived importance of talking to people.

#### 2.4. *Uncertainty Reduction Theory and Social Media Posting*

People's interest in social media can be understood through the context of social capital (Stefanone et al., 2013), or the idea that "involvement and participation in groups can have positive consequences for the individual and the community" (Portes, 1998, p. 2). Social support, defined as "a process of using communication and other sorts of behavior to help another person manage problematic integration" is one form of social capital that facilitates coping through uncertainty reduction (Ford et al., 1996, p. 191; see also Albrecht & Adelman, 1987). Although the concepts of social capital and social support are not new, they have gained revived attention in the age of social media. In this context, URT has been successful in explaining information-seeking and uncertainty reduction through social media encounters (Antheunis et al., 2010). Due to social media's ability to represent "a face-saving avenue for uncertain or apprehensive communicators," online information seeking becomes "an effective method for gaining confidence about the world and future interactions" (Stefanone et al., 2013, p. 62).

Focusing on the conditions that exist before uncertainty reduction, scholars posited that people use passive, active, and interactive strategies to reduce uncertainty (Berger & Bradac, 1982). Of particular importance to this study are the active and interactive strategies. In the active strategy, people seek information about a situation through indirect means, such as the media, to reduce uncertainty. In the interactive strategy, individuals engage in direct communication with others, including through social media and mobile telephony. In fact, information-seeking through conversation with another person is an option for people facing uncertainty in a social situation (Berger & Kellermann, 1994; Knobloch & Solomon, 2002). Social media and mobile phones have facilitated such interactions with individuals and extended them to effective interactions with groups. When people use social media during crises as a source of information, they cultivate relationships and provide reciprocal communication, which are two characteristics of URT (Merrifield, 2011).

With regards to the media landscape, TV and online news websites are prominent information channels in

Syria, where most TV stations are owned by the government and adopt a pro-government agenda (Trombetta & Pinto, 2018). The pro-government station Sama TV is ranked as the most viewed channel (Fiedler et al., 2016). Among the pan-Arab stations watched by the Syrians, Al Jazeera and Al Arabia are anti-government, whereas Al Mayadeen is pro-government concerning Syria (Trombetta & Pinto, 2018). During the Syrian conflict, the government and revolting citizens engaged in what Shehabat (2012, p. 1) called the “first social media cyber-war.” In November 2012, the Syrian Electronic Army launched multiple campaigns against local and regional television stations and media outlets that supported the rebels (Shehabat, 2012). This disrupted several TV channels and online outlets and led many to engage in online information dissemination (Setrakian & Zerden, 2014). Given the relationship between interactive uncertainty reduction strategies and social networks that can alleviate uncertainty during wartime through social support and a sense of community, we would expect people to post more on social media when they are uncertain. Thus, we raise the following research question:

RQ2: Is uncertainty toward media and people related to a higher tendency to post on social media?

### 3. Method

This study is based on a cross-sectional survey of 2,192 Syrian individuals living in Syria, as well as Lebanon (28%), Jordan (24%), and Turkey (8%), the three countries that hosted the largest number of displaced Syrians during the conflict (Connor, 2018). The sample size was based on an estimated population of 22.5 million (95% CI,  $\pm 2.5$ ) and divided proportionally across Syria (40%), Lebanon (28%), Jordan (24%), and Turkey (8%) based on the estimated proportion of refugees in these countries and according to UNHCR numbers in January–February 2014 when the fieldwork was conducted. Overall, 80% of participants were living outside of refugee camps and 20% were living inside of refugee camps, while 9% were internally displaced. Of those outside Syria, 30% lived in refugee camps in Lebanon, Jordan, and Turkey. After discarding incomplete questionnaires, a total of 1,820 cases were analyzed.

#### 3.1. Sampling Procedure

Because Syrians inside refugee camps tend to be organized in a relatively discernable distribution, a weighted multistage cluster sampling technique was used for recruitment. Multistage cluster sampling is a common method used in refugee camps, especially when a simple random sample is not possible, and a sampling frame is not available. Refugee camps are organized into clusters, with each of these clusters containing several “households.” We first selected a random sample of clusters

from each camp. Then we selected a random sample of households from each cluster. Within each household, one person was interviewed following a selection protocol that ensures diversity: the oldest male under 65, then (in the next household visited) the youngest female above 18, then the youngest male above 18, then the oldest female under 65, and so forth.

As for displaced Syrians living outside camps, these so-called socially invisible communities tend not to be registered and widely dispersed in homes of relatives and friends and hotels and privately rented apartments across each country (Sulaiman-Hill & Thompson, 2011). The best method of recruitment for such a population where no adequate sampling frame or contact lists exist is a snowball sampling technique with multiple entry points. To reduce selection bias, researchers used multiple and diverse entry points, using a small number of links from each entry point. Researchers used their significant list of Syrian contacts as entry points, including Syrian researchers, students, and colleagues, as well as various Syrian NGOs. Additionally, aid organizations (International Rescue Committee, UNHCR) provided information about potential participants who approach them for registration. Within each family or household, the same selection protocol used inside refugee camps was implemented to ensure diversity.

Due to varying degrees of literacy among the participants, researchers used a researcher-administered questionnaire approach to ensure higher reliability and more complete information. Additionally, the study used hard-copy questionnaires instead of online questionnaires to limit sampling bias against participants who are not computer literate. The survey questionnaire was in Arabic, comprised 35 close-ended questions, required approximately 15 minutes to complete, and generated 185 variables, of which 67 are related to this study.

#### 3.2. Sample Demographics

The sample consisted of adults between 18 and 65 years old, 54% of whom were males. Four demographic measurements were controlled for gender, age, education, and income. Most respondents were between 25 and 34 years old (35%), followed by those between 18 and 24 (27%). As for education, approximately three-quarters of the sample indicated they had at least completed high school, while less than a quarter (22%) had a bachelor’s degree, and only 3% had a graduate degree. Among the respondents, half reported making between \$75 and \$350 per month, while 18% reported a monthly income of less than \$70.

#### 3.3. Measurements

Four variables measured media exposure: newspaper, TV, radio, and online media (news websites, blogs, and social media). Each variable measured time spent on that media for news on a typical day. Respondents indicated

how much time they spent talking to others on a typical day. Responses were measured on a 6-point scale (0–1hr, 2hr, 3hr, 4hr, 5hr, 6hr or more). In addition, respondents were asked to write down the TV station they follow the most.

Four variables measured emotional reactions about negative emotions and four about positive ones as they relate to media sources. Answers were measured using a 4-point Likert-type scale (1 = *less*; 4 = *more*). For negative affect, participants were asked whether each of the four media—and whether talking to people—makes them feel more or less anxious, uncertain, angry, or in danger. An index was then created by averaging the four negative emotions for each type of information source. Reliability of each index was measured using Cronbach's alpha with the following results: TV = .718; radio = .806; newspapers = .783; online media = .774; talking to people = .780. For positive affect, respondents were asked about feeling secure, proud, aware, and hopeful. The variables related to emotions were retrieved from previous studies as follows: (a) Feelings of anger, pride, and hopefulness were used in Boyle et al.'s (2004) study on emotional reactions and consumption behavior after the 9/11 attacks; (b) feelings of danger and security were reported by the Syrians themselves in Melki and Kozman (2020); and (c) anxiousness and awareness were included in Berger and Calabrese's (1975) study on the development of interpersonal communication. To these, "feeling uncertain" was added as a direct measure of uncertainty in URT. Cronbach's alpha coefficients for positive emotions of each index are: TV = .703; radio = .823; newspapers = .840; online media = .745; talking to people = .730.

To measure the perceived importance of information sources, respondents indicated the level of importance they consider the media and interpersonal relationships to have for daily news about Syria. Response choices were based on a 4-point Likert-type scale ranging from *not at all important* to *very important*.

## 4. Results

### 4.1. Emotions and Media Uses

H1a, which posited a negative correlation between negative emotions connected to the media people follow and time spent following news from these media, was not supported for any of the four media types ( $r_{TV} = .01, p < .30$ ;  $r_{radio} = -.02, p < .35$ ;  $r_{newspapers} = .08, p < .09$ ;  $r_{online} = -.01, p < .33$ ). Similarly, H1b, which predicted a negative correlation between negative emotions caused by talking to people and time spent talking to people, was not supported ( $r = -.02, p < .30$ ).

H2a, which hypothesized that positive emotions connected to the media people follow are positively correlated to the time they spend following news from these media, was supported for all four media. Pearson's one-tailed correlation tests revealed a significant relationship between people's positive emotions toward television

and the time they spend receiving news on television,  $r = .16, p < .001$ . The relationship was also significant for radio ( $r = .24, p < .001$ ), newspapers ( $r = .10, p < .05$ ), and online media ( $r = .22, p < .001$ ). H2b, which posited that the positive emotions caused by talking to others are positively related to the time individuals spend talking to others, was also supported ( $r = .09, p < .001$ ). We also tested the relationship between individual emotions and time spent on information sources. All individual positive emotions were significantly related to all four media sources and people. For negative emotions, none of the individual emotions were significant for TV or for talking to people, but they were all significant for newspapers. For radio, only feeling in danger was related to time spent on the medium, while feeling angry was related to time spent on the internet.

### 4.2. Uncertainty and Media Uses

RQ1a, which examined the relationship between uncertainty connected to media exposure and time spent on these media, was not supported for any media source ( $r_{TV} = -.01, p < .69$ ;  $r_{radio} = -.05, p < .27$ ;  $r_{newspapers} = .06, p < .28$ ;  $r_{online} = -.05, p < .15$ ). Similarly, RQ1b was not supported for interpersonal communication ( $r = -.02, p < .34$ ).

### 4.3. Positive Emotions and Perceived Media Importance

H3a, which hypothesized that the relationship between positive emotions and media uses is moderated by the perceived importance of the media used, was supported for TV and online news. To test this hypothesis for each medium, we conducted an analysis of covariance where time spent on media was the dependent variable, the index of positive emotions toward the media was the independent variable, and the perceived importance of media individuals considered for daily news about Syria was the covariate. To create the fixed factors needed to perform the analysis of variance, the index of positive emotions was recoded into an ordinal variable with three levels: low, medium, and high positivity. In the case of TV, the covariate was significantly related to time spent on TV,  $F(1, 1,642) = 90.9, p < .001$ . As for online media, the covariate was the index of three variables: perceived importance of news websites, blogs, and social media for daily news about Syria (Cronbach's alpha = .714). The covariate was also significantly related to time spent on online media,  $F(1, 935) = 65.01, p < .001$ . The moderators for radio and newspaper exposure could not be tested because both dependent variables were not normally distributed. Data transformation also did not normalize the data. Due to the presence of many outliers, we deemed it inappropriate to delete all those cases. Regardless, newspapers and radio had few followers in Syria to start with.

H3b, which predicted that the perceived importance individuals have about talking to people about

Syria moderates the relationship between positive emotions and media, was supported. The covariate was significantly related to time spent talking to people,  $F(1, 1,619) = 45.9, p < .001$ . Entering the covariate in the model, however, rendered the previously significant effect,  $F(2, 1,643) = 7.15, p < .002$ , of the main independent variable of positive emotions non-significant.

#### 4.4. Uncertainty and Posting on Social Media

To test RQ2 concerning the correlation between uncertainty and frequency of posting on social media, we created indexes for uncertainty and social media posting. The uncertainty index was created by averaging six questions about uncertainty toward TV, radio, newspapers, online media, mobile phones, and talking to people (Cronbach's alpha = .645), while the social media posting index was the average of three questions asking respondents how often they post news and information about Syria on Twitter, Facebook, and YouTube (Cronbach's alpha = .639). Pearson's correlation analysis indicated a very weak negative correlation, where the less uncertain (the more certain) individuals are, the higher their tendency to post on social media,  $r(1,435) = -.046, p < .05$ . Testing the relationship between posting and uncertainty toward each of the six sources revealed the significance is due to the presence of TV. In other words, the more certain (the less uncertain) respondents were from watching TV news, the more they posted on social media ( $r_{TV} = -.06, p < .05$ ). All other source types were not significant ( $r_{radio} = .03, p < .47$ ;  $r_{newspapers} = -.02, p < .71$ ;  $r_{online} = -.01, p < .97$ ;  $r_{mobile} = .02, p < .62$ ;  $r_{interpersonal} = -.01, p < .68$ ).

### 5. Discussion and Conclusion

This study examined URT during wartime through a cross-sectional survey of displaced and non-displaced Syrians living in Syria, Jordan, Turkey, and Lebanon. The study assessed people's emotions and their media uses as methods for reducing uncertainty to cope with the stressful situation under which they found themselves during the Syrian civil war. The findings show a positive relationship between positive emotions and time spent on media. The data also demonstrate that the perceived importance of the media moderates the relationship between positive emotions towards these media and time spent on them, particularly TV and online media. The same applies to interpersonal communication. In other words, time spent on TV, online media, and interpersonal communication is influenced by people's perception of how important these sources are in providing news about the Syrian conflict. Finally, a significant relationship between (un)certainly towards TV and posting on social media indicated that the more some people are certain about TV, the more likely they are to engage in social media posting. However, our findings show no correlation between negative emotions connected to media

uses and interpersonal communication, on one hand, and time spent on these media and on talking to people, on the other. In addition, the data show no relation between uncertainty connected to media uses (or talking to people) and time spent consuming information from these media (or interpersonal communication sources).

The positive, albeit weak, relationship we found between positive emotions attributed to the media and information-seeking, could mean the more secure, proud, and hopeful people feel, the more likely they are to spend time on television, radio, newspaper, and online media. The same pattern appears in interpersonal communication, only when people perceive it to be important. These findings agree with Brashers' (2001) notion that people seek information to sustain feelings of optimism or hope. We conclude that people use different forms of communication to reassure themselves during a crisis, perhaps seeking more positive information and hope. During a war that is as long as the Syrian experience, it seems people look for information that reaffirms their positive feelings and brings them hope. This supports Tajfel and Turner's (1979) concept of self-enhancement as a motive, whereby people want to sustain if not intensify their self-esteem.

This study also addressed Goldsmith's (2001) criticism of the original model of URT that failed to account for the quality of obtained information, by testing the perceived importance of information sources. Findings reveal the relationship between positive emotions and media uses was moderated by the perceived importance of TV and online media, which include news websites, blogs, and social media. In other words, feelings of pride, security, and hopefulness that TV and online media generate in people determine the time they spend on these sources, where the perceived importance of these media is an important but not essential determinant to the equation. The findings are consistent with those of Neuberger and Silk (2016), who suggest how respondents perceive media's usefulness influences whether or not they choose these media to consume information. This goes hand in hand with the risk information seeking and processing model, which suggests people tend to acquire information and process it based on characteristics that include perceived usefulness of information (Griffin et al., 1999; Kahlor, 2007). During the Syrian uprising, the credibility, usefulness, and importance of the medium were highly important, specifically because most traditional news media were in the hands of the government. The same could not be said about the relationship between positive emotions and time spent talking to others, where the moderating role of perceived importance of talking to people about Syria canceled out any initial effect positive emotions generated. Thus, feelings of pride, security, and hopefulness generated by talking to others are not related to time spent talking to them. Rather, the perceived importance of human interactions determines how much time people spend talking to one another about Syria.

In contrast to the significant link between positive emotions and time spent on certain media, this study found no evident relationship between these media uses and negative emotions. These findings run contrary to previous research that determined individuals put more effort into getting information when they experience negative emotions (Boyle et al., 2004; Lachlan et al., 2009), among which is uncertainty (Kellermann & Reynolds, 1990). Although it is plausible that people would seek to reduce negative feelings to be able to reason and reach proper decisions (Brashers et al., 2000; Ford et al., 1996), the evidence in these studies contradicts ours possibly because protracted war is marked by different circumstances than relatively short, violent incidents such as the 9/11 attacks. As the current study was conducted several years into the conflict, it is apparent Syrians were exhausted from the negativity and war trauma, and thus, any negative feelings regarding media or interpersonal sources did not translate into seeking or avoiding them for information. We would have expected these negative feelings to prompt media and information avoidance in a manner similar to the effect of compassion fatigue (Moeller, 2002), but the findings do not point in that direction either. Perhaps the importance of seeking information during wartime counterbalances the need to avoid painful feelings generated from media and people alike.

Finally, the question of whether uncertainty toward media and interpersonal communication is related to a higher tendency to post on social media revealed the opposite, where those who posted frequently were less uncertain than others. This finding is consistent with the relationship between positive feelings and time spent consuming media. These social media activities could also be explained through the context of social capital (Stefanone et al., 2013), where people's participation in the community can have positive outcomes and social support—the process of using communication to aid others (Ford et al., 1996). Additionally, people cultivate relationships and provide reciprocal communication when they use social media during crises (Merrifield, 2011). Given that legacy media were controlled by either the Syrian government or the rebels, some people may have taken upon themselves the responsibility of sharing information on social media and were more likely to do so when they felt certain about the information they got from legacy media. Sharing material on social media exposes new facts not covered in legacy media but also promotes certain news already disseminated in dominant legacy media (Lynch et al., 2014). In fact, our findings revealed that the significance between posting and uncertainty is mainly due to TV. The less uncertain respondents were about watching TV news, the more they posted on social media, while the relationships with all other media were not significant. This confirms the primacy of TV during a crisis (Melki & Kozman, 2020; Melki et al., 2020; Spence et al., 2007) and establishes a relationship between exposure to this dominant legacy

medium and the tendency of audiences who feel certain about it to post on social media. This finding is important given that global news media outlets were highly dependent on user-generated content during the Syria war (Hänska-Ahy & Shapour, 2013). Based on our data, such content is tightly related to legacy media consumption, further signaling the role traditional television still plays in people's lives in uncertain times. It is possible that regions where different media dominate would also witness a significant link between user-generated content and certainty toward these media. Also important to note is the significant differences between the countries housing Syrians in terms of TV following. Although in the sample Al Arabia ranked first ( $n = 407$ ), followed by Al Jazeera ( $n = 264$ ), pro-government Syrian channel Sama TV ( $n = 140$ ), pan-Arab channel Orient TV ( $n = 137$ ), Lebanese channel Al Jadeed ( $n = 103$ ), and pan-Arab channel Al Mayadeen ( $n = 103$ ), we found these choices to differ based on the host country,  $\chi^2(15) = 645.48$ ,  $p < .001$ . Al Arabia was still the most followed channel in Jordan and Lebanon, as well as Syria, where respondents equally followed Sama TV ( $n = 123$  and  $124$ , respectively). In these countries, the second most-watched channel was either a local channel (as in the case of Lebanon) or Al Jazeera (as in the case of Jordan). In Turkey, the most followed channels were Syrian Orient TV and Al Jazeera, respectively. These numbers highlight the nuances attached to a medium of preference, leading us to refrain from making broad generalizations about a specific channel.

In sum, this study challenges some established premises of URT, particularly in the context of protracted war. The discrepancy between our findings and extant research is most likely due to the differences in the time element. While the studies we have referred to focused on uncertainty reduction, emotions, and media use in the direct aftermath of catastrophic events, the current research measured these relationships years into the war. Based on Ball-Rokeach and DeFleur's (1976) dependency theory, people seek information more frequently in the early stages of a particular event. It is arguable, then, that individuals would change their behavior after significant time has passed. People living in extended circumstances of negativity and surrounded by negative news, as in the case of this study, become either overwhelmed by such negativity and try to avoid exacerbating it with further negative news, or such circumstances become the norm and audiences become numb to additional doses of negativity. Regardless, for audiences living through war, the feeling of uncertainty is not a trigger for more media exposure. On the other hand, positive emotions attract more media exposure, thus audiences living in war prefer to increase positive emotions, which in return may minimize negative emotions, including the feeling of uncertainty. By joining both lines of thought, we can conclude that people indirectly reduce uncertainty when there is an opportunity to maximize positive emotions but do not seek to reduce it



through additional exposure to media, about which they are uncertain. In other words, during extended crises, people aim to maximize positivity, exposing themselves to sources they associate with positive emotions.

Although the findings demonstrated the critical role media and interpersonal communication play during war, we highlight some limitations that may be addressed through future research. Our snapshot survey data may have led to different findings if the fieldwork had taken place at different periods of the war, indicating the benefit of longitudinal data collection and comparisons over time. Regarding individual motivations, research has demonstrated that people who are highly involved in politics are active consumers of media and purposely seek information (Chaffee & McLeod, 1973; McCombs, 1972; Melki & Kozman, 2020). Thus, future research can differentiate between highly motivated consumers and individuals who are less or not engaged politically. Finally, the limitations related to researching war conditions include limited access to dangerous areas and regions experiencing active conflict, particularly regions controlled by ISIS. In addition, the lack of a sampling frame made probability sampling impossible, preventing generalizations to the Syrian population. Nevertheless, these allow the generalization to the common conditions of populations living under war conditions.

### Acknowledgments

This work was supported by Media in Cooperation and Transition and the German Federal Foreign Office.

### Conflict of Interests

The authors declare no conflict of interest.

### Disclaimer

The Arab-German Young Academy of Sciences and Humanities (AGYA) is supporting the thematic issue “Ten Years after the Arab Uprisings: Beyond Media and Liberation,” edited by AGYA alumna Hanan Badr (Gulf University of Science and Technology, Kuwait) and AGYA member Lena-Maria Möller (Max Planck Institute for Comparative and International Private Law, Germany). AGYA is funded by the German Federal Ministry of Education and Research (BMBF). The authors remain solely responsible for the content and recommendations provided in this publication, which do not reflect the positions of AGYA or any of its funding partners.

### References

- Afifi, W. A., & Weiner, J. L. (2004). Toward a theory of motivated information management. *Communication Theory, 14*(2), 167–190.
- Albrecht, T. L., & Adelman, M. B. (1987). *Communicating social support*. SAGE.

- Aldoory, L., & Austin, L. (2011). Relationships building and situational publics: Theoretical approaches guiding today’s health public relations. In T. L. Thompson, R. Parrott, & J. F. Nussbaum (Eds.), *The Routledge handbook of health communication* (pp. 132–145). Routledge.
- Antheunis, M. L., Valkenburg, P. M., & Peter, J. (2010). Getting acquainted through social network sites: Testing a model of online uncertainty reduction and social attraction. *Computers in Human Behavior, 26*(1), 100–109.
- Ball-Rokeach, S. J., & DeFleur, M. L. (1976). A dependency model of mass-media effects. *Communication Research, 3*(1), 3–21.
- Baxter, L. A., & Wilmot, W. W. (1984). “Secret tests” social strategies for acquiring information about the state of the relationship. *Human Communication Research, 11*(2), 171–201.
- Berger, C. R., & Bradac, J. J. (1982). *Language and social knowledge: Uncertainty in interpersonal relations* (Vol. 2). Hodder Education.
- Berger, C. R., & Calabrese, R. (1975). Some explorations in initial interactions and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research, 1*, 99–112.
- Berger, C. R., & Kellermann, K. (1994). Acquiring social information. In J. A. Daly & J. M. Wiemann (Eds.), *Strategic interpersonal communication* (pp. 1–31). Routledge.
- Boyle, M. P., Schmierbach, M., Armstrong, C. L., McLeod, D. M., Shah, D. V., & Pan, Z. (2004). Information seeking and emotional reactions to the September 11 terrorist attacks. *Journalism & Mass Communication Quarterly, 81*(1), 155–167.
- Bradac, J. J. (2001). Theory comparison: Uncertainty reduction, problematic integration, uncertainty management, and other curious constructs. *Journal of Communication, 51*(3), 456–476.
- Brashers, D. E. (2001). Communication and uncertainty management. *Journal of Communication, 51*(3), 477–497.
- Brashers, D. E., Neidig, J. L., Haas, S. M., Dobbs, L. K., Cardillo, L. W., & Russell, J. A. (2000). Communication in the management of uncertainty: The case of persons living with HIV or AIDS. *Communication Monographs, 67*(1), 63–84.
- Chaffee, S. H., & McLeod, J. M. (1973). Individual vs. social predictors of information-seeking. *Journalism Quarterly, 50*, 237–245.
- Connor, P. (2018, January 29). Most displaced Syrians are in the Middle East, and about a million are in Europe. *Pew Research Center*. <https://www.pewresearch.org/fact-tank/2018/01/29/where-displaced-syrians-have-resettled>
- Driskill, L. P., & Goldstein, J. R. (1986). Uncertainty: Theory and practice in organizational communication. *The Journal of Business Communication, 23*(3), 41–56.

- Fiedler, A., Veenstra, B., & Spilker, D. (2016). *Syria audience research*. Free Press Unlimited. <https://kq.freepressunlimited.org/evidence/syrian-audience-research-2016-quantitative-qualitative-reports-documents-available-upon-request>
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. McGraw-Hill.
- Ford, L. A., Babrow, A. S., & Stohl, C. (1996). Social support messages and the management of uncertainty in the experience of breast cancer: An application of problematic integration theory. *Communications Monographs*, 63(3), 189–207.
- Goldsmith, D. J. (2001). A normative approach to the study of uncertainty and communication. *Journal of Communication*, 51(3), 514–533.
- Griffin, R. J., Dunwoody, S., & Neuwirth, K. (1999). Proposed model of the relationship of risk information seeking and processing to the development of preventive behaviors. *Environmental Research*, 80(2), 230–245.
- Grunig, S. D. (1997). Research, reputation, and resources: The effect of research activity on perceptions of undergraduate education and institutional resource acquisition. *The Journal of Higher Education*, 68(1), 17–52.
- Hänska-Ahy, M. T., & Shapour, R. (2013). Who's reporting the protests? Converging practices of citizen journalists and two BBC world service newsrooms, from Iran's election protests to the Arab uprisings. *Journalism Studies*, 14(1), 29–45.
- Heath, R. L., & Gay, C. D. (1997). Risk communication: Involvement, uncertainty, and control's effect on information scanning and monitoring by expert stakeholders. *Management Communication Quarterly*, 10(3), 342–372.
- Heath, R. L., Liao, S. H., & Douglas, W. (1995). Effects of perceived economic harms and benefits on issue involvement, use of information sources, and actions: A study in risk communication. *Journal of Public Relations Research*, 7(2), 89–109.
- Hogg, M. A. (2000). Subjective uncertainty reduction through self-categorization: A motivational theory of social identity processes. *European Review of Social Psychology*, 11(1), 223–255.
- Huddy, L., Feldman, S., Taber, C., & Lahav, G. (2005). Threat, anxiety, and support of antiterrorism policies. *American Journal of Political Science*, 49(3), 593–608.
- Kahlor, L. A. (2007). An augmented risk information seeking model: The case of global warming. *Media Psychology*, 10(3), 414–435.
- Kellermann, K., & Reynolds, R. (1990). When ignorance is bliss: The role of motivation to reduce uncertainty in uncertainty reduction theory. *Human Communication Research*, 17(1), 5–75.
- Knobloch, L. K. (2015). Uncertainty reduction theory. In *The international encyclopedia of interpersonal communication* (pp. 1–9). Wiley. <https://doi.org/10.1002/9781118540190.wbec144>
- Knobloch, L. K., & Solomon, D. H. (2002). Information seeking beyond initial interaction: Negotiating relational uncertainty within close relationships. *Human Communication Research*, 28(2), 243–257.
- Kozman, C., & Melki, J. (2018). News media uses during war: The case of the Syrian conflict. *Journalism Studies*, 19(10), 1466–1488.
- Kubey, R. W., & Peluso, T. (1990). Emotional response as a cause of interpersonal news diffusion: The case of the space shuttle tragedy. *Journal of Broadcasting & Electronic Media*, 34(1), 69–76.
- Lachlan, K. A., Spence, P. R., & Seeger, M. (2009). Terrorist attacks and uncertainty reduction: Media use after September 11. *Behavioral Sciences of Terrorism and Political Aggression*, 1(2), 101–110.
- Lerman, C., Hughes, C., Trock, B. J., Myers, R. E., Main, D., Bonney, A., Abbaszadegan, M. R., Harty, A. E., Franklin, B. A., Lynch, J. F., & Lynch, H. T. (1999). Genetic testing in families with hereditary nonpolyposis colon cancer. *Journal of the American Medical Association*, 281, 1618–1622.
- Lynch, M., Freelon, D., & Aday, S. (2014). *Syria's socially mediated civil war*. Universitäts- und Landesbibliothek Sachsen-Anhalt.
- Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). *Affective intelligence and political judgment*. University of Chicago Press.
- McCombs, M. E. (1972). Mass communication in political campaigns: Information, gratification, and persuasion. In F. G. Kline & P. J. Tichenor (Eds.), *Current perspectives in mass communication research* (pp. 169–194). SAGE.
- Melki, J., & Jabado, M. (2016). Mediated public diplomacy of the Islamic State in Iraq and Syria: The synergistic use of terrorism, social media, and branding. *Media and Communication*, 4(2), 92–103.
- Melki, J., & Kozman, C. (2020). Selective exposure during uprisings: Examining the public's news consumption and sharing tendencies during the 2019 Lebanon protests. *The International Journal of Press/Politics*, 26(4), 907–928. <https://doi.org/10.1177/1940161220972892>
- Melki, J., & Kozman, C. (2021). Media dependency, selective exposure and trust during war: Media sources and information needs of displaced and non-displaced Syrians. *Media, War & Conflict*, 14(1), 93–113.
- Melki, J., Tamim, H., Hadid, D., Farhat, S., Makki, M., Ghandour, L., & Hitti, E. (2020). Media exposure and health behavior during pandemics: The mediating effect of perceived knowledge and fear on compliance with Covid-19 prevention measures. *Health Communication*. Advance online publication. <https://doi.org/10.1080/10410236.2020.1858564>
- Merrifield, N. A. (2011, February 25). *A relational approach to reducing uncertainty during a crisis through the use of mobile technology* [Paper presentation]. 33rd Annual Research Symposium of the

College of Communication and Information, Tennessee, US.

- Moeller, S. D. (2002). *Compassion fatigue: How the media sell disease, famine, war, and death*. Routledge.
- Nabi, R. L. (2003). Exploring the framing effects of emotion: Do discrete emotions differentially influence information accessibility, information seeking, and policy preference? *Communication Research*, 30(2), 224–247.
- Neuberger, L., & Silk, K. J. (2016). Uncertainty and information-seeking patterns: A test of competing hypotheses in the context of health care reform. *Health Communication*, 31(7), 892–902.
- Pfau, M., Kendall, K. E., Reichert, T., Hellweg, S. A., Lee, W., Tusing, K. J., & Prosis, T. O. (1997). Influence of communication during the distant phase of the 1996 republican presidential primary campaign. *Journal of Communication*, 47(4), 6–26.
- Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology*, 24(1), 1–24.
- Powers, S., & O’Loughlin, B. (2015). The Syrian data glut: Rethinking the role of information in conflict. *Media, War & Conflict*, 8(2), 172–180.
- Procopio, C. H., & Procopio, S. T. (2007). Do you know what it means to miss New Orleans? Internet communication, geographic community, and social capital in crisis. *Journal of Applied Communication Research*, 35(1), 67–87.
- Reid, S. A., & Hogg, M. A. (2005). Uncertainty reduction, self-enhancement, and ingroup identification. *Personality and Social Psychology Bulletin*, 31(6), 804–817.
- Riffe, D., & Stovall, J. G. (1989). Diffusion of news of shuttle disaster: What role for emotional response? *Journalism Quarterly*, 66(3), 551–556.
- Setrakian, L., & Zerden, A. (2014). Mapping the information-sharing ecosystem of Syria. *PRISM*, 4, 132–143.
- Shehabat, A. (2012). The social media cyber-war: The unfolding events in the Syrian revolution 2011. *Global Media Journal: Australian Edition*, 6(2). [http://www.hca.westernsydney.edu.au/gmjau/archive/v6\\_2012\\_2/ahmad\\_shehabat%20\\_RA.html](http://www.hca.westernsydney.edu.au/gmjau/archive/v6_2012_2/ahmad_shehabat%20_RA.html)
- Smith, T. W., Rasinski, K. A., & Toce, M. (2001). *America rebounds: A national study of public response to the September 11th terrorist attacks*. National Opinion Research Center at the University of Chicago. [https://www.norc.org/PDFs/publications/SmithT\\_America\\_Rebounds\\_2001.pdf](https://www.norc.org/PDFs/publications/SmithT_America_Rebounds_2001.pdf)
- So, J., Kuang, K., & Cho, H. (2016). Reexamining fear appeal models from cognitive appraisal theory and functional emotion theory perspectives. *Communication Monographs*, 83(1), 120–144.
- Spence, P. R., Lachlan, K. A., & Burke, J. M. (2007). Adjusting to uncertainty: Coping strategies among the displaced after Hurricane Katrina. *Sociological Spectrum*, 27(6), 653–678.
- Stefanone, M. A., Hurley, C. M., & Yang, Z. J. (2013). Antecedents of online information seeking. *Information, Communication & Society*, 16(1), 61–81.
- Stiegler, R., Tilley, S., & Parveen, T. (2011). Finding family and friends in the aftermath of a disaster using federated queries on social networks and websites. *13th IEEE International Symposium on Web Systems Evolution (WSE)*, 2011, 21–26. <https://doi.org/10.1109/WSE.2011.6081815>
- Sulaiman-Hill, C. M., & Thompson, S. C. (2011). Sampling challenges in a study examining refugee resettlement. *BMC International Health and Human Rights*, 11(1), 1–10.
- Sunnafrank, M. (1986). Predicted outcome value during initial interactions: A reformulation of uncertainty reduction theory. *Human Communication Research*, 13(1), 3–33.
- Syria conflict: 76,000 die in deadliest year—Activists. (2015, January 1). *BBC*. <https://www.bbc.com/news/world-middle-east-30648181>
- Tajfel, H., & Turner, J. (1979). An integrative theory of group conflict. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in the social psychology of intergroup relations* (pp. 33–47). Academic Press.
- Trombetta, L., & Pinto, C. (2018). Syria. *Media Landscapes*. <https://medialandscapes.org/country/syria>

### About the Authors



**Claudia Kozman** (PhD) is an assistant professor of multimedia journalism in the Department of Communication Arts and research director of the Institute of Media Research and Training at the Lebanese American University. Her research focuses on news content, particularly news values, sourcing, framing, and intermedia issue transfer in Arab media. She has conducted studies on the Syrian conflict, including the media uses of displaced Syrian nationals, as well as the Lebanese and American news media coverage of the war.



**Rana Tabbara** is an MA in multimedia journalism student and a research assistant at the Institute of Media Research and Training at the Lebanese American University. Her research interests include media representation of women, media uses and gratification, and news framing. Rana is also a journalist at the *Lebanese L’Orient Today* and has previously worked with news teams at *The New York Times* and TF1.



**Jad Melki** (PhD) is an associate professor of journalism and media studies, chairperson of the Communication Arts Department, and director of the Institute of Media Research and Training at the Lebanese American University. He is also visiting faculty at the Salzburg Academy and an affiliated researcher with International Center for Media and the Public Agenda at the University of Maryland. His research focuses on media literacy, health communication, conflict journalism, media and war, and gender studies in the Arab world.