Welcome or Not: Comparing #Refugee Posts on Instagram and Pinterest

7 authors, including:

Jeanine P.D. Guidry
Virginia Commonwealth University
27 PUBLICATIONS **227** CITATIONS

SEE PROFILE

Lucinda Austin
University of North Carolina at Chapel Hill
40 PUBLICATIONS **772** CITATIONS

SEE PROFILE

Kellie E. Carlyle
Virginia Commonwealth University
35 PUBLICATIONS **1,032** CITATIONS

SEE PROFILE

Karen Freberg
University of Louisville
30 PUBLICATIONS **480** CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:

Project   Corporate Reputation and the News Media View project

Project   How Financial Crisis History Informs Ethical Corporate Communication: Insights from Public Relations Leaders View project

Article

Welcome or Not: Comparing #Refugee Posts on Instagram and Pinterest

Jeanine P. D. Guidry[1], Lucinda L. Austin[2],
Kellie E. Carlyle[1], Karen Freberg[3],
Michael Cacciatore[4], Yan Jin[4], and Marcus Messner[1]

Abstract

The Syrian refugee crisis, started in 2011, has resulted in millions of Syrians fleeing their homes: 6.6 million have been internally displaced and more than 4.6 million have fled the country. This flow of refugees has led to both humanitarian efforts to assist refugees and growing views of refugees as a threat to receiving countries' security and autonomy. Sentiments about the still-growing crisis are increasingly expressed on social media platforms, including visual ones like Instagram and Pinterest. However, little is known about *what* and *how* information about refugees is presented on these platforms. The current study addresses this gap by conducting a quantitative content analysis of a random sample of 750 Instagram posts and 750 Pinterest posts to evaluate and compare visual and textual messaging surrounding this crisis. Results show that Pinterest messages more frequently depict security-concern sentiment and include more unique visual components than Instagram. Across platforms, security-concern posts were more likely to be framed thematically; whereas most humanitarian-concern posts were framed episodically. The study concludes with a discussion of implications for communication scholars and practitioners that may inform the development of visual-based social-mediated messaging.

Keywords

refugees, Instagram, Pinterest, visual communication

[1]Virginia Commonwealth University, Richmond, VA, USA
[2]University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
[3]University of Louisville, Louisville, KY, USA
[4]University of Georgia, Athens, GA, USA

Corresponding Author:
Jeanine P. D. Guidry, Richard T. Robertson School of Media and Culture, Virginia Commonwealth University, 901 West Main Street, Richmond, VA 23284, USA.
Email: guidryjd@vcu.edu

Few visuals in recent memory have had the impact of the 2015 photo of the lifeless body of Syrian toddler Alan Kurdi on a Turkey beach. The image of the boy, who died trying to cross the Mediterranean with his family (Walsh, 2015), was shared worldwide and became a visible reminder of the horrors of war and the struggle of refugees attempting to flee from it. Similarly, the image of Omran Daqneesh, bloodied and dazed sitting in an ambulance, was quickly shared on social and traditional media, again, providing a powerful visual reminder of the tolls of war and refugees' struggles (Narayan, 2016). Sentiments about the still-growing refugee crisis are increasingly expressed on social media; however, little is known about *how* such information is presented on these platforms. This article aims to address this gap by examining refugee posts on two visual-oriented social media platforms: Instagram and Pinterest.

Background and Need

Syria's civil war has been described as the worst humanitarian crisis and "the greatest test of humanity faced by the world's rich countries in this century" (Abbasi, Patel, & Godlee, 2015, p. 1). Per the Syrian Observatory for Human Rights, at least 320,000 people have been killed and an additional 1.5 million left wounded or permanently disabled since the fighting began in 2011. By February 2016, the United Nations Office for the Coordination of Humanitarian Affairs (2016) estimated that 13.5 million Syrians—more than half of the country's prewar population—needed humanitarian assistance.

Arguably, the most discussed aspect of the Syrian civil war, at least in Europe and North America, has been the issue of asylum. Large numbers of Syrians have been displaced from their homes due to the violence, including 6.6 million internally displaced persons and an additional 4.6 million refugees who fled the country (Connor & Krogstad, 2016). While most Syrian refugees have stayed in the Middle East—particularly in Lebanon and Jordan—over a million have now fled to other parts of the world, including more than 80,000 entering Europe in the first 2 months of 2016 alone (Clayton, 2016). All told, more than 300,000 refugees and migrants have come across the Mediterranean into Europe, with thousands more having died while attempting to make this escape (Abbasi et al., 2015).

The problem of how best to help refugees has plagued parts of Africa, Asia, Europe, and the Americas for decades. Advances in communication technologies have, in some ways, brought greater visibility, and more visual elements, to more recent crises. Communication about refugees seeking asylum displays stark differences. Many expressions include support, empathy, and understanding of the risks these individuals have taken to leave their country (Gale, 2004), while others have focused more on security concerns or fear that terrorists might use asylum to enter countries to facilitate terror plots (Every & Augoustinos, 2008; McKay, Thomas, & Kneebone, 2012).

Photojournalists have increasingly turned to social media to document the crisis for a larger audience (McGonigal, 2015). But these journalists are not alone in attempting to harness the power of images and social media to frame the refugee story for their publics. Memes have also circulated portraying refugees as security risks, including

several that depict Syrian refugees as cowards, liars, and terrorists (Kleinfeld, 2015). The Syrian refugee crisis is presently one of the most documented—and visual— world crises (McGonigal, 2015). How this crisis is framed in visual social media could have a significant impact on public support for welcoming refugees. Therefore, this study focuses on the characteristics of visual social media communication about this crisis and implications for future research.

Framing and Visual Social Media

While framing remains one of the most popular areas of communication research, discussions around framing theory have fragmented in recent years. Notably, scholars have called for more careful attention to differences between *equivalence* and *emphasis* framing (Cacciatore, Scheufele, & Iyengar, 2016). Equivalence framing involves manipulating the presentation of logically equivalent information, for example, Tversky and Kahneman's (1981) oft-cited Asian disease study. However, emphasis framing focuses on differences in communication content, that is, selection of one set of facts over another (Scheufele & Iyengar, 2012). As such, equivalence frames are more often explored via experimental design, while emphasis frames are often more appropriate for content analysis work, as used here.

Episodic Versus Thematic Framing

One way to examine emphasis frames is to study differences in episodic and thematic framing. Episodic framing presents an issue by telling a specific story, or highlighting a specific example, whereas thematic framing situates issues in broader social contexts (Gross, 2008). In political communication literature, episodic frames, which focus on individual responsibility rather than societal or structural forces, have resulted in lower levels of support for government policies designed to curb unwanted problems (Iyengar, 1991). Conversely, people exposed to thematic frames are more likely to think in broader terms, and, therefore, be more supportive of social policies for addressing issues (Iyengar, 1991). However, emotions elicited by different framing devices complicate this relationship. For example, Gross (2008) found that a highly emotional episodic frame (i.e., resulting in intense feelings of anger and sadness in readers) led to elevated support for policy interventions. In short, emotions produced by a news frame are also an important determinant of its persuasive effects. Emotions are particularly salient here, as social media have become increasingly important for communicating messages about risks and reassuring communities (Austin & Jin, 2016).

Effective communication can be difficult for individuals and organizations tasked with communicating about humanitarian crises. According to Covello, Peters, Wojtecki, and Hyde's (2001) risk perception model, risks framed to evoke fear, terror, or anxiety will be perceived as greater than risks not framed in this manner. Given this, when investigating emphasis frames, it is paramount to explore not only the episodic and thematic nature of the framing but also how risk is communicated, as emotions elicited by such messages may affect public opinion toward refugees.

The exploration of competing emphasis news frames is not a new area of research, even within the context of immigration and refugees. Quinsaat (2014), for example, conducted a content analysis of the New York Times and USA Today on framing of immigration-focused policy debates. Her findings indicate that mainstream mass media, via news story emphasis framing, created "diametrically opposed representations" of immigration and contemporary immigrants (p. 573). Greussing and Boomgaarden (2017) examined Austrian newspaper coverage of refugee issues and found that narratives of national concerns, such as security and economic threats, were most prominent, compared with humanitarian concerns. Similarly, McLaren, Boomgaarden, and Vliegenthart (2017) investigated U.K. newspapers in relation to public opinion data and determined that national concerns, such as the economy and crime/security, were more directly related to negative public opinions about immigration.

Visual Framing Theory

When using visual emphasis frames, scholars have proposed the need for better systems to code visuals, as visuals come with their own challenges, and the method for coding such frames is largely inconsistent (Rodriguez & Dimitrova, 2011). Rodriguez and Dimitrova propose a four-tier system for identifying visual frames including examining visuals as follows: (a) denotative (descriptions of who/what is in the images), (b) semiotic/stylistic (interpretations of meaning behind image style and characteristics), (c) connotative (underlying symbolic meaning of images), and (d) ideological representations (representations of underlying cultural/religious worldviews).

Relatively few studies have focused on the visual aspects of emphasis framing, despite the noted power of images in telling stories and evoking emotions. However, a recent study of Australian newspaper articles found that most articles about refugees used dehumanizing visual patterns to portray them, such as the absence of identifying refugees with recognizable facial features, and depicting them as security or political threats (Bleiker, Campbell, Hutchison, & Nicholson, 2015). When refugees were portrayed without facial features, their images were less likely to evoke compassion, potentially leading to increased tensions in refugee-receiving nations (Bleiker et al., 2015). Another study, by Neumann and Fahmy (2012), analyzed visual war/peace frames in 2009 coverage of the Sri Lankan Civil War on Western newswires, focusing specifically on visual emphasis framing. They found a greater emphasis on "war journalism" in Reuters images, and greater emphasis on "peace journalism" in Associated Press and Getty images—trends that can have substantive impacts on public opinion.

Refugee Frames on Visual Social Media

Much discussion, specifically surrounding the Syrian refugees, has played out on social media. One recent case involved depictions of refugees following the Paris terrorist 2015 attacks that killed hundreds in multiple locations around the city. Darwish

and Magdy (2015) collected Twitter posts before and after the attacks and tagged posts according to different attitudes toward refugees. Despite the attacks taking place in Paris, their analysis revealed that the majority of posts expressing negative sentiments about refugees originated in the United States. In addition, more users were sharing stories via Twitter that could harm (rather than help) public attitudes toward refugee groups. A separate, qualitative, Twitter study focused on the portrayal of male Syrian refugees, and revealed that Syrian men were often portrayed as dangerous (as rapists or terrorists) or as cowardly (unwilling to stay and fight in Syria; Rettberg & Gajjala, 2016). A study of the representation of female refugees on Twitter found that many of the tweets focused on rejection of refugees based on generalizations and stereotypes (Gallego, Gualda, & Rebollo, 2017).

Because the current refugee crisis shows no signs of abating, and visual social media platforms are increasing in both relevance and impact, social media-based discussions continue to play an important role in driving public attitudes toward refugees. As such, it is critical for communications professionals to understand these refugee-centered, visual social media-based conversations in the contexts in which they are already taking place, namely on Instagram and Pinterest. Moreover, visual-based communication is processed differently, remembered more consistently, and acted on more frequently than text-only-based information (Houts, Doak, Doak, & Loscalzo, 2006; Mansoor & Dowse, 2003), yet visual social media platforms like Instagram and Pinterest remain less frequently studied. Given the role of social media in shaping public opinion, it is imperative to understand *what* and *how* information about the Syrian refugee crisis is being portrayed via emphasis frames on visual social media platforms. As such, the first research question is as follows:

> **Research Question 1:** What concerns are present in Instagram and Pinterest posts about Syrian refugees and how are these concerns framed?

Differences Between Social Media Platforms

Although Instagram and Pinterest share many common elements, the platforms have unique characteristics, user bases, strengths, and weaknesses. Both platforms are visually based with posts comprising an image and a textual component (i.e., caption). We focus our analysis specifically on Instagram and Pinterest, as these two platforms have emerged as arguably the most image-focused and visual of the major social media platforms, and as they have received less scholarly attention (Guidry, Carlyle, Messner, & Jin, 2015; Guidry, Jin, Haddad, Zhang, & Smith, 2016).

Despite the growing size and influence of visual social media platforms and the rich sources of information they represent, limited research has examined the content and characteristics of posts on these platforms and how content may differ by platform (Guidry et al., 2015). Understanding differences among platforms would be advantageous for communication professionals looking to better target messages. As such, the second research question is as follows:

Research Question 2: How do posts about refugees on Instagram differ from those on Pinterest in terms of content and engagement?

Method

This study incorporated a quantitative content analysis to examine message framing in posts related to the ongoing Syrian refugee crisis on the social media platforms Instagram and Pinterest.

Sampling

On May 16, 2016, random sampling was used to collect 750 unique Instagram posts and 750 unique Pinterest posts from the #refugee(s), #syrianrefugee(s), #syrianrefugeecrisis, #refugeeswelcome, #refugeesnotwelcome, and #norefugees hashtags/keywords using the public Instagram API and using manual systematic random sampling for Pinterest. These keywords were based on previous refugee social media studies (Darwish & Magdy, 2015; Rettberg & Gajjala, 2016). The posts were all shared between February 19 and April 18, 2016, representing a 2-month time period.

Content Analysis Categories

Coding protocols for the Instagram and Pinterest analysis were developed, tested, and implemented. Greussing and Boomgaarden (2017) and McLaren et al.'s (2017) research informed the operationalization of codes for frames regarding humanitarian concerns (i.e., dispel notions that refugees are mostly young men, resettlement is easy, and refugees not properly screened; people helping, welcoming refugees; refugees just like us, desperate, in need of shelter/help, productive parts of society) and security concerns (i.e., refugees as threat: ISIS fighters, Muslim invasion, all young men, threat to national integrity, economic threat, criminals, terrorists; refugees are cowards, should stay in own country; too easy for refugees to gain access; mentioning Donald Trump favorably, Islam unfavorably). Covello et al.'s (2001) research informed the codes for communicating risk (i.e., fear, danger, dreaded/irreversible consequences, identifiable victim, involuntary nature, inequity, dealing with untrustworthy entities; both from security and humanitarian viewpoints).[1] Posts were also coded as episodic or thematic. As the study included both visual- and text-based message characteristics, denotative frames were also identified describing who/what was shown in visuals (i.e., presence of person, refugees and children, refugee faces, refugees fleeing, refugee camps, threatening images for either refugees or public; Rodriguez & Dimitrova, 2011). This list was adopted from existing content analyses of Syrian refugee-related posts (Bleiker et al., 2015; Darwish & Magdy, 2015; Rettberg & Gajjala, 2016). All codes were coded dichotomously (either yes/no or present/absent). Visuals were coded for visual type (image, text, meme, infographic, drawing, video, other) as well as image hue. Last, posts were coded for engagement variables (likes/comments on Instagram, and repins/likes/comments on Pinterest).
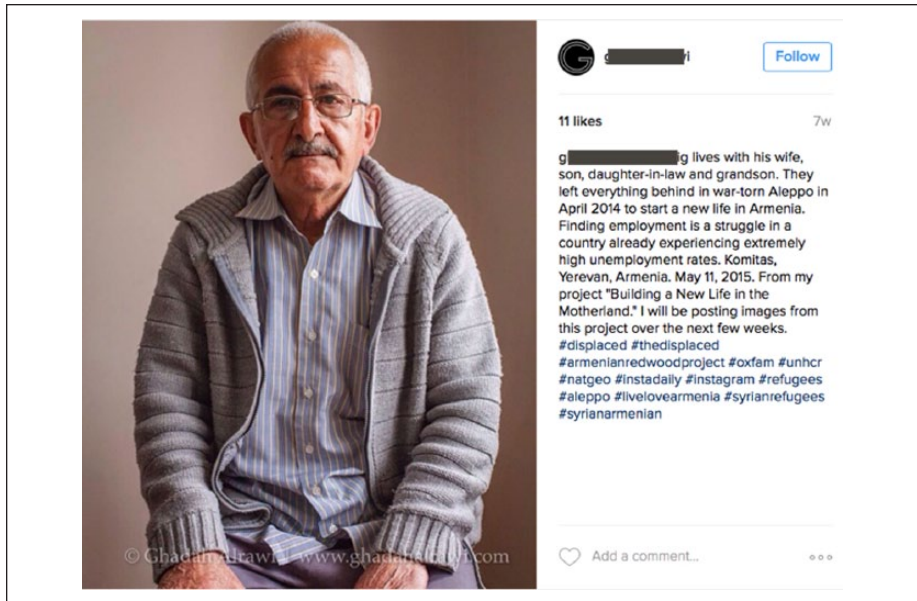
Figure 1. Example "humanitarian-concern" Instagram post.

Intercoder Reliability

Two coders, trained to establish intercoder reliability, coded 10% of posts ($n = 75$ for both Instagram and Pinterest). The first coder coded the remaining posts. After pretesting and subsequent coding protocol changes, intercoder reliability testing showed Scott's (1955) Pi was on average .84. Individual coefficients were all reliable, with the lowest at .70 (complete list is available on request).

Results

Research Question 1: Concerns Present and Framing in Posts About Syrian Refugees

Concerns present were operationalized into two broad categories of "humanitarian" and "security" concerns. Of 750 Instagram posts, 75.1% ($n = 563$) were humanitarian-concern focused, and 24.9% ($n = 187$) were security-concern focused (e.g., see Figures 1 and 2). Of 750 Pinterest posts, 60.8% ($n = 456$) were humanitarian-concern focused, and 39.2% ($n = 294$) were security-concern focused (e.g., see Figures 3 and 4). Instagram posts elicited more comments overall: 46.8% ($n = 351$). Instagram used more purely visual images (65.3%, $n = 490$) than Pinterest (37.9%, $n = 284$).

In terms of framing, Instagram users relied on episodic framing most frequently (42.8%, $n = 321$); Pinterest users preferred thematic framing (49.6%, $n = 372$). On
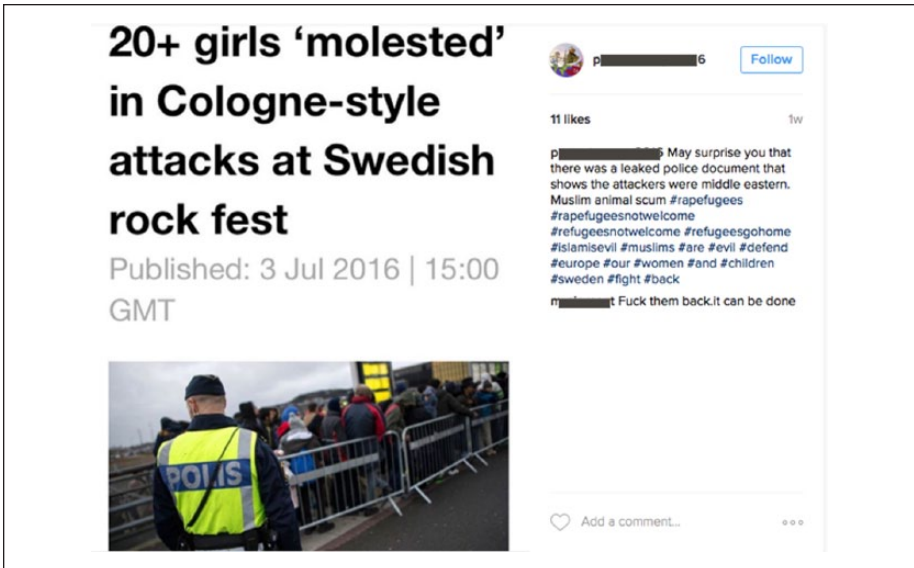
Figure 2. Example "security-concern" Instagram post.

both platforms, humanitarian-concern posts were more likely to employ episodic framing (47.0%, $n = 479$), while security-concern posts more frequently used thematic framing (68.6%, $n = 330$).

Instagram and Pinterest use somewhat different engagement variables. While both shared engagement mechanisms of "likes" (until April 2017) and comments, Pinterest adds the "repin" function (comparable with Twitter's "retweet"). For validity reasons, only like and comment frequencies were compared. Since engagement variables on Instagram and Pinterest were not normally distributed, nonparametric tests were used to analyze for differences in engagement.

Mann–Whitney U tests were run to determine possible associations between platform type (Instagram or Pinterest) and public engagement through likes and comments. Like frequencies were statistically significantly[2] higher for Instagram ($Mdn = 24.00$) than Pinterest posts ($Mdn = 1.00$), $U = 116,754.500$, $z = -19.738$, $p < .001$. Comment median frequencies were also significantly higher on Instagram (.00) compared with Pinterest (.00), $U = 168,587.000$, $z = -17.236$, $p < .001$; however, this difference was too small to be of practical significance.

Next, a series of logistic regression models was performed to determine the effect of specific visual and message characteristics on the likelihood that posts would either be humanitarian-concern or security-concern-focused. A total of 45 significant results are briefly described below and can be viewed in their entirety in Table 1.

When examining visual type as a predictor of sentiment type, the results revealed that, compared with Instagram posts with primarily image-based visuals, Instagram posts with a mix of image and text were less likely to be humanitarian-focused, and more likely to be security-focused. Compared with Pinterest posts with primarily
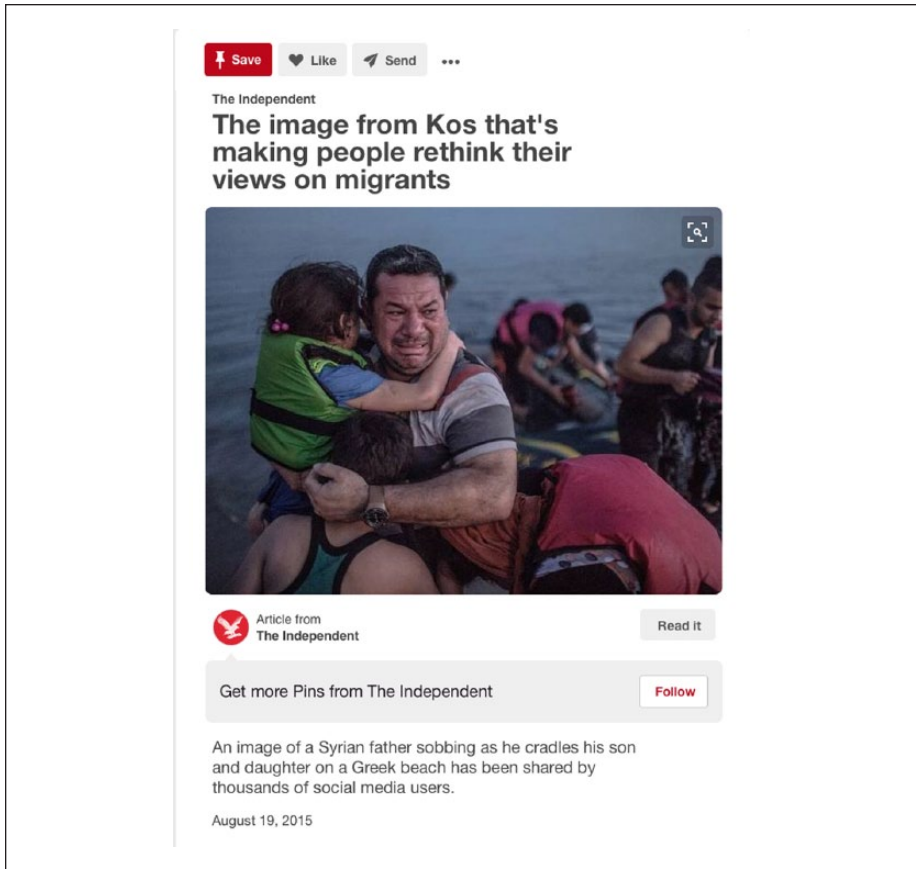
Figure 3. Example "humanitarian-concern" Pinterest post.

image-based visuals, pins with an image of primarily text, an infographic, or a drawing were significantly more likely to be humanitarian-focused and less likely to be security-focused.

Compared with episodically framed posts, thematically framed posts had significantly higher odds to be humanitarian-focused, and significantly higher odds to be security-focused. Instagram posts that portrayed refugees fleeing by land or by sea in their visuals had significantly higher odds to be humanitarian-focused and lower odds to be security-focused. Pinterest posts that showed refugee camps in their visuals had significantly higher odds to be humanitarian-focused and lower odds to be security-focused. Instagram and Pinterest visuals that showed a person had significantly lower odds to be humanitarian-focused and higher odds to be security-focused. However, Pinterest visuals that showed a refugee child had significantly higher odds to be humanitarian-focused than security-focused (for complete results, see Table 1).
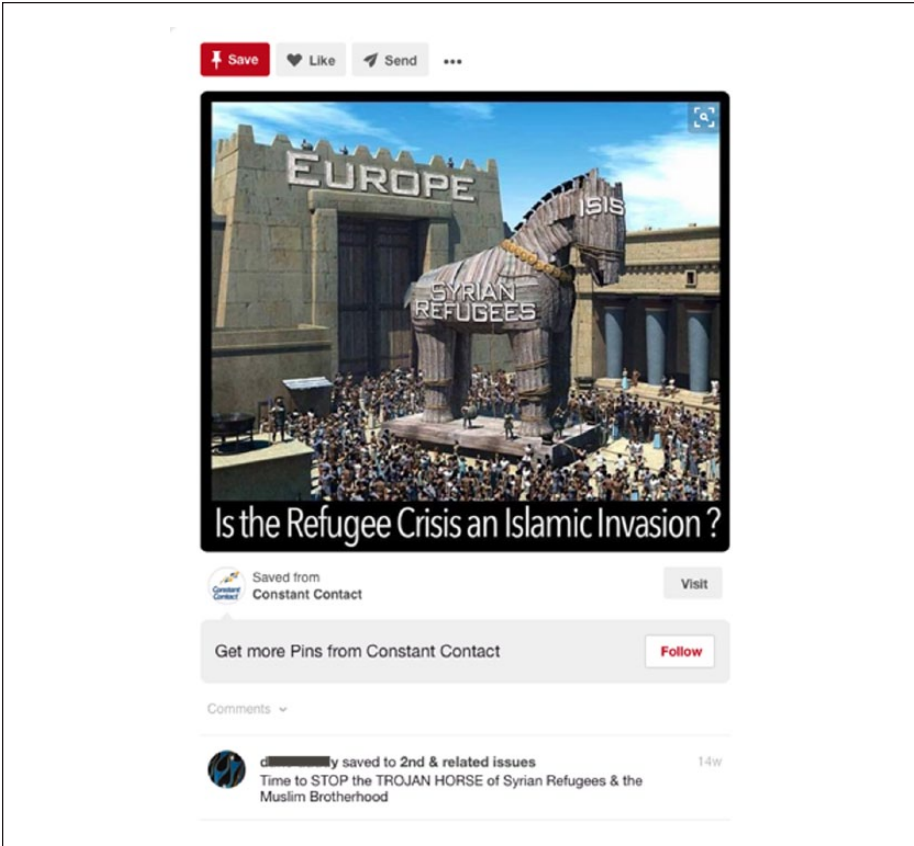
Figure 4. Example "security-concern" Pinterest post.

Research Question 2: Differences in Content and Engagement of Refugee-Focused Posts by Platform

Chi-square tests for association were carried out between all humanitarian and security-concern variables and platform type (see Table 2). The majority of the variables produced a significant association with one social media platform over another. For instance, there was a significant association between security-concern (e.g., blaming refugees for terror attacks, refugees being cowards, refugees as part of a Muslim invasion) and social media platform, with greater emphasis of these expressions on Pinterest. Conversely, when looking at humanitarian-concern expressions (e.g., expressing a call to help and refugees being in need), Instagram emerged as the more popular platform.

Mann–Whitney U tests were run to determine associations between humanitarian- and security-concern on Instagram and Pinterest and resulting public engagement. No

Table 1. Odds Ratios for Instagram and Pinterest Humanitarian- and Security-Concern Posts.

Platform	Tone	Variable	Odds ratio	95% Confidence interval	p
Instagram	Humanitarian	Constant	10.549	N/A	<.001
		Visual: Mix of image/text	0.173	[0.098, 0.304]	<.001
		Framing: Thematic	0.198	[0.110, 0.356]	<.001
		Person present	0.216	[0.114, 0.410]	<.001
		Multiple persons present	1.920	[1.038, 3.549]	.038
		Show refugees fleeing	17.798	[1.901, 164.738]	.012
Pinterest	Humanitarian	Constant	2.212	N/A	.023
		Visual: Primarily text	2.872	[1.021, 8.078]	.046
		Visual: Infographic	14.368	[2.786, 74.093]	.001
		Visual: Drawing	10.305	[2.369, 44.821]	.002
		Framing: Thematic	0.303	[0.185, 0.497]	<.001
		Framing: Both	2.650	[1.318, 5.328]	.006
		Person present	0.419	[0.218, 0.805]	.009
		Multiple persons present	0.363	[0.213, 0.619]	<.001
		Refugee child present	24.543	[11.777, 51.145]	<.001
		Show tent(s)/refugee camp(s)	5.491	[1.250, 24.118]	.024
Instagram	Security	Constant	0.095	N/A	<.001
		Visual: Mix of image/text	5.782	[3.285, 10.175]	<.001
		Framing: Thematic	5.062	[2.809, 9.123]	<.001
		Person present	4.619	[2.440, 8.744]	<.001
		Multiple persons present	0.521	[0.282, 0.963]	.038
		Show refugees fleeing	0.057	[0.006, 0.526]	.012
Pinterest	Security	Constant	0.182	N/A	.024
		Visual: Primarily text	0.348	[0.124, 0.979]	.046
		Visual: Infographic	0.070	[0.013, 0.359]	.001
		Visual: Drawing	0.097	[0.022, 0.422]	.002
		Framing: Thematic	3.296	[2.011, 5.402]	<.001
		Framing: Both	0.377	[0.188, 0.759]	.006
		Person present	2.387	[1.243, 4.583]	.009
		Multiple persons present	2.755	[1.614, 4.701]	<.001
		Refugee child present	0.041	[0.020, 0.085]	<.001
		Show tent(s)/refugee camp(s)	0.182	[0.041, 0.800]	.024

significant results were found for Instagram posts (complete results are available on request). However, on Pinterest, like frequencies were significantly higher in humanitarian-concern posts (Mdn = 13.00) than in non-humanitarian-concern posts (Mdn = 11.00), U = 74,405.500, z = 2.676, p = .007. Like frequencies were significantly lower

Table 2. Chi-Square Humanitarian- and Security-Concern Variables by Social Media Platform.

Humanitarian- or security-concern	Variable	Chi-square value	Degrees of freedom	p	Direction of result
Security	Blame refugees for terror attacks	31.746	1	<.001	Pinterest
Security	Ban refugee entry	97.255	1	<.001	Instagram
Security	Refugees are cowards	7.418	1	.006	Pinterest
Security	Refugees part of Muslim invasion	214.377	1	<.001	Pinterest
Security	Refugees disguised ISIS fighters	123.059	1	<.001	Pinterest
Security	Refugees are young men	47.819	1	<.001	Pinterest
Security	Refugees should stay in home country	19.952	1	<.001	Pinterest
Security	Mention Donald Trump favorably	15.471	1	<.001	Instagram
Security	Mention Islam unfavorably	20.027	1	<.001	Pinterest
Security	Threat to national integrity	13.387	1	<.001	Pinterest
Security	Refugees are criminals	22.487	1	<.001	Pinterest
Security	Refugees can easily come to Western nations	87.804	1	<.001	Pinterest
Security	Refugees are economic threat	22.016	1	<.001	Pinterest
Security	Terror attack threat	44.419	1	<.001	Instagram
Humanitarian	People helping refugees	125.30	1	<.001	Instagram
Humanitarian	Dispel idea that refugees not screened	12.087	1	.001	Pinterest
Humanitarian	Call to help refugees	23.020	1	<.001	Instagram
Humanitarian	Refugees in need	40.000	1	<.001	Instagram

on Pinterest in security-concern posts (Mdn = 11.00) than in non-security-concern posts (Mdn = 13.00), U = 59,658.500, z = −2.676, p = .007.

We created a series of 12 composite variables representing "intensity scores" for our four main categories of variables: humanitarian-concern, security-concern, risk variables for humanitarian-concern, and risk variables for security-concern, as outlined in Table 3. Each variable represented in the composite score could be present in one of three elements of the post: visual (V), caption (C), or both (B). Thus, intensity scores for each category were calculated by summing the number of category-specific variables present in each post element, with higher scores representing greater sentiment intensity. Independent sample t tests comparing mean intensity scores across Instagram and Pinterest were then carried out. Of 12 total tests, 10 yielded significance. Mean intensity scores (see Table 3) for visual-based messages were significantly higher on Pinterest for security-concern variables, humanitarian-concern

Table 3. *t* Tests: Humanitarian- and Security-Concern Intensity Score Present by Platform.

Variable	*t*	*df*	*p*	Direction
SC visual	−5.830	1000.55	<.001	Pinterest
SC both[a]	−9.826	858.52	<.001	Pinterest
HC visual	−8.027	1201.40	<.001	Pinterest
HC caption	12.208	1214.41	<.001	Instagram
HC both[a]	2.298	1497	.022	Instagram
Risk SC visual	−12.005	1221.97	<.001	Pinterest
Risk SC caption	−4.950	1255.85	<.001	Pinterest
Risk HC visual	−7.710	1169.02	<.001	Pinterest
Risk HC caption	10.400	1061.36	<.001	Instagram
Risk HC both[a]	3.047	1475.52	.002	Instagram

Note. df = degrees of freedom; HC = humanitarian-concern; SC = security-concern.
[a]Both visual and caption.

variables, security-concern risk variables, and humanitarian-concern risk variables. In contrast, mean intensity scores for caption-based messages were significantly greater on Instagram for humanitarian-concern variables and humanitarian-concern risk variables. Interestingly, all significant findings for security-concern variables and security-concern risk variables were significantly greater on Pinterest than Instagram, whether messages within the post were visual-based, caption-based, or both.

Last, we focused on communication about risk in refugee-focused posts on Instagram and Pinterest. Chi-square tests for association were carried out between humanitarian- and security-concern risk perception variables and social media platform types. Table 4 contains details of significant results. The majority of variables produced significant associations with the type of social media platform. Security-concern expressions (e.g., fear of refugees and refugees perceived as dangerous) and the Pinterest platform were significantly associated. Conversely, when looking at humanitarian-concern expressions (e.g., refugees' fear and dreaded outcomes for refugees), a smaller majority exhibited significant associations with Instagram.

Discussion

This study examined posts on Instagram and Pinterest to understand how social media users react to the ongoing Syrian refugee crisis on these platforms. The results provide an understanding of best practices for initiating and responding to refugee-related visual social media posts for those working in refugee resettlement, public health, and public affairs fields.

Emphasis Framing and Its Implications

Our findings revealed Instagram displayed more episodic framing, while Pinterest contained more thematic framing. Across both platforms, humanitarian-concern posts

Table 4. Chi-Square Humanitarian- and Security-Concern Risk Perception Variables by Platform.

Humanitarian- or security-concern	Risk perception variable	Chi-square value	df	p	Direction of result
Security	People afraid of refugees	68.929	1	<.001	Pinterest
Security	Refugees perceived as dangerous	71.100	1	<.001	Pinterest
Security	Government forces refugee resettlement	12.973	1	<.001	Pinterest
Security	Unfair advantage refugees	4.011	1	.045	Pinterest
Security	Mistrust of government	44.415	1	<.001	Pinterest
Humanitarian	Refugees are afraid	19.480	1	<.001	Instagram
Humanitarian	Refugees perceive danger	6.898	1	.009	Instagram
Humanitarian	Refugees forced to leave their nations	4.405	1	.036	Pinterest
Humanitarian	Unfair disadvantage refugees	5.893	1	.015	Instagram
Humanitarian	Identifiable refugee victim	3.909	1	.048	Pinterest
Humanitarian	Dreaded outcome for refugees	22.294	1	<.001	Instagram

were more likely to be episodically framed (posts telling stories of specific refugees or aid workers). Security-concern posts were more likely to be thematically framed, focusing on larger issues of the refugee crisis rather than specific people or events. This may indicate the increased security-concern sentiment of Pinterest, as users framed the issue with a broader brush, implying how users are likely to view not only the issue of refugees and asylum but also solutions to this issue.

Specifically, emphasis on episodic frames for humanitarian sentiment likely means those sympathetic to refugees' plight are missing opportunities to portray the issue as requiring societal-level or policy-focused solutions. Rather, focusing on individual refugee stories may be actively hurting chances to sway public opinion toward asylum and welcoming more refugees. Conversely, those against asylum seem to be taking advantage of thematic framing: casting refugees in a negative light and suggesting banning refugees entering from Syria. Given people's tendency to be more supportive of policy solutions when framed thematically (Iyengar, 1991), this bolsters those communicating against asylum. As Gross (2008) suggests, however, episodic frames with high emotion, such as anger or sadness, can also lead to increased support for policy interventions. When operating within episodic frames, eliciting high emotions may still prove powerful in swaying audiences.

Consistent with the focus on security-concern posts, Pinterest had more expressions of fear of refugees and perceptions of refugees as dangerous. Instagram, on the other hand, displayed more humanitarian-concern expressions—including refugees' fear and dreaded outcomes for refugees. Posts on both platforms focused on fear, terror, and anxiety; however, from different angles. Covello et al. (2001) suggested that

risks framed in this manner are more likely to enhance risk perceptions. Likely, this framing reinforced the fear and perceived risk users already had for their security or for refugees themselves. Also, as deep concern about high-risk crises has been shown to interfere with individuals' ability to process information and engage in rational dialogue (Cairns, de Andrade, & MacDonald, 2013), the focus on fear and terror likely discourages users from being open to other viewpoints and arguments. Communicators might utilize this knowledge in messaging to reduce fear and anxiety in communication when possible, counter messages relying on fear as a mechanism for misinformation, and begin to open the door for more rational discourse.

Specifically, between visuals and text, both security-concern and humanitarian-concern intensity scores for visuals were significantly greater on Pinterest than Instagram; however, humanitarian-concern intensity scores for *captions* were significantly higher for Instagram posts. In other words, Pinterest visuals contained more refugee-focused details, while Instagram's refugee-focused details were primarily present in captions (the textual part of posts). Given that visuals are processed more quickly than text-based information (Houts et al., 2006), communications professionals should consider increased focus on designing visuals for these two platforms, particularly on Instagram, as this may increase salience and resonance of these messages.

Platform Differences

Content analysis revealed several differences between Instagram and Pinterest. Security-concern variables and risk perception variables were more frequently associated with Pinterest, while humanitarian-concern variables and risk perception variables were more often associated with Instagram. In other words, refugees, on Pinterest, were more likely portrayed as economic, political, or security threats to the nations they seek asylum in. This finding is particularly interesting given the difference in user base between Instagram and Pinterest: Pinterest users are predominantly female, while Instagram's users are more diverse, both in ethnicity and socioeconomic status. Given this demographic, the security-concern focus on Pinterest could relate to women's (or perhaps more accurately, mothers') greater attention to safety and security for their families, possibly amplified by the already higher levels of fear-based security-concern messages on Pinterest.

Refugee-focused posts on Instagram elicited more comments than similar posts on Pinterest. Comments are an indication of the potential for bidirectional communication, and may suggest opportunities to engage public conversation around this issue. Pinterest, with its higher security-concern sentiment, tended to produce fewer comments; however, humanitarian posts still elicited more engagement than security-focused posts. Although Pinterest users posted more security-concern posts, users of the platform did not respond most to those types of posts. Lack of response to security-concern posts could indicate that users did not engage with this particular sentiment or that security-concern sentiment was accepted with less pushback. Of course, part of this phenomenon may simply be due to platform nature. Nevertheless, supporters of asylum for Syrian refugees might consider strategies to increase potential for conversation on

this platform. Meanwhile, opponents of asylum will likely want such bidirectional communication to remain limited on the platform.

Recommendations for Refugee Communications

With the current refugee crisis showing no signs of abating, the representation of refugees on social media platforms can play a potentially powerful role in how opinions about refugees are formed and maintained. Visual platforms can be expected to play an especially important role since they can communicate information faster and more emotionally (Houts et al., 2006). Communication professionals working in this space can play a role in shaping representations and conversations that can follow; an understanding of the patterns present in platforms represents an important first step in this process.

Based on the findings, we recommend the following for communicators to inform the development of targeted visual messaging to counter security-concern sentiment. First, communicators should use strategies targeted specifically for different platforms, and be aware of differences between platforms and their uses (and users). Moreover, we recommend pursuing strategies to increase engagement through comments on Pinterest within newly designed prorefugee messages. However, the focus must extend beyond Pinterest. While Instagram hosted a greater percentage of humanitarian-concern messages, the emphasis was on the textual information as far as intensity and information density was concerned. Enhancing visual representations of refugees—in addition to thematic framing—specifically on Instagram could increase support for humanitarian-concern policy interventions.

Instagram and Pinterest will likely reach and engage different population segments, and communication professionals should not rely exclusively on one strategy or platform to influence refugee-focused conversations and representations on social media. However, communications professionals wishing to address treatment of refugees in this humanitarian crisis could harness visual social media platforms to counter security-concern sentiment.

Limitations and Future Directions

This study has several limitations, and some point to future study possibilities. First of all, this analysis focuses on a specific risk perception theory to the exclusion of others. Future studies could consider other risk and crisis communication theories as a lens to view this process. Second, this study compared two visual social media platforms, excluding more text-based platforms like Twitter. Comparing visual platforms with more text-based ones may reveal findings that are excluded in the current study. Because we compared several different characteristics and elements of each post across both platforms, our statistical power was reduced. Future studies may consider purposive sampling to ensure multiple comparisons can be made with adequate statistical power to detect differences. Another recommendation for future research is exploring geolocation and its influence on message perception. Finally, more in-depth

qualitative study examining visual elements of refugee-focused posts and resulting perceptions could provide additional insight into the influence of various visual features, particularly with regard to bidirectional communication surrounding this critical global issue.

Conclusion

In summary, this study explored differences in the visual social media platforms Instagram and Pinterest regarding posts about the ongoing Syrian refugee crisis. Posts were examined for whether they focused primarily on security concerns or humanitarian concerns. Findings revealed that Pinterest included predominantly more security-concern sentiment; whereas Instagram included more humanitarian-concern sentiment. Posts with humanitarian-concern sentiment received more comments and discussion across both platforms; however, posts on Pinterest elicited fewer comments in general. Security-concern posts were more likely to be framed thematically; whereas humanitarian-concern posts were framed episodically. As thematic frames have shown increased potential for creating support for policy interventions, this is an area of potential concern and an opportunity for message reframing for refugee communications. Visuals in humanitarian-concern posts—particularly on Instagram—were lacking in intensity, compared with the intensity of text captions, also suggesting an opportunity for message enhancement through the increased use of salient visuals.

Declaration of Conflicting Interests

Funding

Notes

1. For example, the security fear concern would be refugees should be/are feared, while the humanitarian fear concern would be refugees being afraid of what they are facing.
2. Hereafter referred to as "significantly."

References

Abbasi, K., Patel, K., & Godlee, F. (2015). Europe's refugee crisis: An urgent call for moral leadership. *British Medical Journal*, *351*, h4833. doi:10.1136/bmj.h4833

Austin, L. L., & Jin, Y. (2016). Social media and crisis communication: Explicating the social-mediated crisis communication model. In A. Dudo & L. A. Kahlor (Eds.), *Strategic communication: New agendas in communication* (pp. 163-186). New York, NY: Routledge.

Bleiker, R., Campbell, D., Hutchison, E., & Nicholson, X. (2015). The visual dehumanisation of refugees. *Australian Journal of Political Science*, *48*, 398-416.

Cacciatore, M. A., Scheufele, D. A., & Iyengar, S. (2016). The end of framing as we know it . . . and the future of media effects. *Mass Communication and Society*, *19*, 7-23.

Cairns, G., de Andrade, M., & MacDonald, L. (2013). Reputation, relationships, risk communication, and the role of trust in the prevention and control of communicable disease: A review. *Journal of Health Communication*, *18*, 1550-1565.

Clayton, J. (2016). *Some 80,000 refugees arrive in Europe in first six weeks of 2016: UNHCR concerned over increasing restrictive measures, urges effective comprehensive European response*. Retrieved from http://www.unhcr.org/en-us/news/latest/2016/2/56bdf0f26/80000-refugees-arrive-europe-first-six-weeks-2016.html

Connor, P., & Krogstad, J. M. (2016). *Key facts about the world's refugees*. Retrieved from http://www.pewresearch.org/fact-tank/2016/10/05/key-facts-about-the-worlds-refugees/

Covello, V. T., Peters, R. G., Wojtecki, J. G., & Hyde, R. C. (2001). Risk communication, the West Nile virus epidemic, and bioterrorism: Responding to the communication challenges posed by the intentional or unintentional release of a pathogen in an urban setting. *Journal of Urban Health*, *78*, 382-391.

Darwish, K., & Magdy, W. (2015). *Attitudes towards refugees in light of the Paris attacks*. Retrieved from https://www.researchgate.net/publication/287250632_Attitudes_towards_Refugees_in_Light_of_the_Paris_Attacks.

Every, D., & Augoustinos, M. (2008). "Taking advantage" or fleeing persecution? Opposing accounts of asylum seeking. *Journal of Sociolinguistics*, *12*, 648-667.

Gale, P. (2004). The refugee crisis and fear: Populist politics and media discourse. *Journal of Sociology*, *40*, 321-340.

Gallego, M., Gualda, E., & Rebollo, C. (2017). Women and refugees in Twitter: Rhetorics on abuse, vulnerability and violence from a gender perspective. *Journal of Mediterranean Knowledge*, *2*, 37-58.

Greussing, E., & Boomgaarden, H. G. (2017). Shifting the refugee narrative? An automated frame analysis of Europe's 2015 refugee crisis. *Journal of Ethnic and Migration Studies*, *43*, 1749-1774. doi:10.1080/1369183X.2017.1282813

Gross, K. (2008). Framing persuasive appeals: Episodic and thematic framing, emotional response, and policy opinion. *Political Psychology*, *29*, 169-192.

Guidry, J., Jin, Y., Haddad, L., Zhang, Y., & Smith, J. (2016). How health risks are pinpointed (or not) on social media: The portrayal of waterpipe smoking on Pinterest. *Health Communication*, *31*, 659-667.

Guidry, J. D., Carlyle, K., Messner, M., & Jin, Y. (2015). On pins and needles: How vaccines are portrayed on Pinterest. *Vaccine*, *33*, 5051-5056.

Houts, P. S., Doak, C. C., Doak, L. G., & Loscalzo, M. J. (2006). The role of pictures in improving health communication: A review of research on attention, comprehension, recall, and adherence. *Patient Education and Counseling*, *61*, 173-190.

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago, IL: University of Chicago.

Kleinfeld, P. (2015). *Calling bullshit on the anti-refugee memes flooding the Internet*. Retrieved from https://www.vice.com/en_ca/article/kleinfeld-refugee-memes-debunking-846

Mansoor, L. E., & Dowse, R. (2003). Effect of pictograms on readability of patient information materials. *Annals of Pharmacotherapy*, *37*, 1003-1009.

McGonigal, C. (2015). *These Instagram accounts are documenting the refugee crisis*. Retrieved from http://www.huffingtonpost.com/entry/these-instagram-accounts-are-documenting-the-refugee-crisis_us_56057be0e4b0af3706dc0349

McKay, F. H., Thomas, S. L., & Kneebone, S. (2012). "It would be okay if they came through the proper channels": Community perceptions and attitudes toward asylum seekers in Australia. *Journal of Refugee Studies*, *25*, 113-133.

McLaren, L., Boomgaarden, H., & Vliegenthart, R. (2017). News coverage and public concern about immigration in Britain. *International Journal of Public Opinion Research*. Advance online publication. doi:10.1093/ijpor/edw033

Narayan, C. (2016). *Little boy in Aleppo a vivid reminder of war's horror*. Retrieved from http://www.cnn.com/2016/08/17/world/syria-little-boy-airstrike-victim/

Neumann, R., & Fahmy, S. (2012). Analyzing the spell of war: A war/peace framing analysis of the 2009 visual coverage of the Sri Lankan Civil War in Western newswires. *Mass Communication and Society*, *15*, 169-200.

Quinsaat, S. (2014). Competing news frames and hegemonic discourses in the construction of contemporary immigration and immigrants in the United States. *Mass Communication and Society*, *17*, 573-596.

Rettberg, J. W., & Gajjala, R. (2016). Terrorists or cowards: Negative portrayals of male Syrian refugees in social media. *Feminist Media Studies*, *16*, 178-181. doi:10.1080/14680777.2016.1120493

Rodriguez, L., & Dimitrova, D. V. (2011). The levels of visual framing. *Journal of Visual Literacy*, *30*, 48-65.

Scheufele, D. A., & Iyengar, S. (2012). The state of framing research: A call for new directions. In K. Kenski & K. H. Jamieson (Eds.), *The Oxford handbook of political communication theories* (pp. 619-632). New York, NY: Oxford University.

Scott, W. A. (1955). Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly*, *19*, 321-325.

Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *185*, 1124-1131.

United Nations Office for the Coordination of Humanitarian Affairs. (2016). *About the crisis*. Retrieved from http://www.unocha.org/syrian-arab-republic/syria-country-profile/about-crisis

Walsh, B. (2015). *Alan Kurdi's story: Behind the most heartbreaking photo of 2015*. Retrieved from http://time.com/4162306/alan-kurdi-syria-drowned-boy-refugee-crisis/

Author Biographies

Jeanine P.D. Guidry, PhD, is an assistant professor at the Robertson School of Media and Culture at Virginia Commonwealth University (VCU). Her research agenda is focused on visual social media platforms and health, risk, and crisis communication.

Lucinda L. Austin, PhD, is an assistant professor at the University of North Carolina Chapel Hill. Her research focuses on social media, health and crisis communication, and publics' perspectives in CSR and relationship-building.

Kellie E. Carlyle, PhD, is an associate professor in the Department of Health Behavior and Policy at Virginia Commonwealth University (VCU). Her research focuses on sexual violence, intimate partner violence, and media effects.

Karen Freberg, PhD, is an associate professor at the University of Louisville. Her research focuses on reputation management, social media, and crisis communication.

Michael Cacciatore, PhD, is an assistant professor at the University of Georgia. His research focuses on risk communication as well as media depictions of risk issues.

Yan Jin, PhD, is an associate professor and associate director of the Center for Health and Risk Communication at the University of Georgia. Her research focuses on crisis communication, social media, and the role of emotions in strategic conflict management.

Marcus Messner, PhD, is an associate professor at the Robertson School of Media and Culture at Virginia Commonwealth University. His research focuses on the influence and adoption of social media in journalism, PR and health communication.