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Exploring National Tourism Organizations' (NTOs) Use of YouTube to Communicate Information on Destination Safety and Security

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Abstract

Prior studies on destination image and risk perceptions have pointed out that various information sources affect tourists' risk perceptions and overall image of the destination. In the case of providing tourist safety and security videos, it can be a double-edged sword. Such videos may be useful for informing tourists about potential risks and reminding them to be more vigilant, but it may also trigger risk perceptions that could hinder potential visitors to travel to the destination. This study sought to understand the current use of tourist safety videos by National Tourism Organizations (NTOs). Guided by theories of risk perceptions and the Elaboration Likelihood Model (ELM), a content analysis approach was used to describe the design, contents, and message persuasion attributes of safety-related videos uploaded by NTOs in their official YouTube channels. Exhaustive search from 169 NTOs (countries) garnered 29 videos revealing that formal advertisement style accompanied by background music was the most popular video design. Conflict-based and natural disaster risks were frequently reported as situation updates at the affected destinations. In terms of the message strategies, neutral frame, positive valence and psychological appeals were mostly adopted. Implications for such strategies are discussed.

Keywords: Destination safety and security, National Tourism Organizations, YouTube, Risk communication, Message Design

Introduction

Safety and security are vital for tourists. They need to be informed on possible risks and ways to stay safe at the destination. Considering that the tourism industry has experienced many crises and disasters over the last decade including terrorist attacks, political instability, economic recession, biosecurity threats and natural disasters (Mair, Ritchie & Walters, 2016), social media platforms, such as YouTube can be used to effectively communicate during a tourism crisis (Pennington-Gray, London, Cahyanto, & Klages, 2011).

However, it can be argued that providing safety or risk-related information could affect an individual's perception of the risk at the destination. The processing strategies that people apply to information encountered in the mass media or elsewhere can make a big difference in what they take away from messages about risks (Eagly & Chaiken, 1993; Petty & Cacioppo, 1986). Instead of providing an increased sense of awareness and knowledge to prepare against possible risks, safety information may trigger unnecessary risk perceptions about the destination. For example, an individual who is exposed to information about crime safety guidelines might interpret the information as a warning and that the information was provided due to high crime rate at the destination.

Therefore, the need to ensure safety and security information is provided in a way that avoids negative perceptions of the destination is critical. One way this may be possible is by adopting strategies from the persuasion literature. Scholars of public relations have discussed the use of persuasion in communicating safety information (Yang, Kang & Johnson, 2010; Arpan & Pompper, 2003). The literature on persuasion highlights certain strategies that can be used to avoid or decrease negative perceptions associated with information about risks. For example, highlighting the source credibility, using certain presentation styles and content characteristics, and focusing on peripheral cues can aid in persuading audiences to engage in the behavior the message hopes to achieve (Xu & Zhang, 2018). With the proliferation of social media in today's society, using platforms, such as YouTube, can be a useful way to persuade audiences through audio-visual message characteristics. As destinations struggle to maintain a positive image and memorable experience, implementing strategies of persuasion in safety and security videos can decrease negative perceptions of tourists and provide information in a way that does not instill fear.

Within this scope, this study seeks to provide an initial enquiry into the national tourism organizations' (NTOs) practice of providing safety information videos via YouTube and to describe the characteristics of the video contents. A content analysis approach was applied to investigate the following research questions:

1. How many NTOs provide safety and security videos on their YouTube channel?
2. What are the presentation styles attributes of the safety and security YouTube videos implemented by NTOs in terms of; (a) visual style; (b) information delivery style; and (c) audio style?
3. What are the content attributes of the safety and security YouTube videos posted by NTOs in terms of (a) types of safety and security risks; (b) types of safety and security measures; (c) message framing; (d) message appeals; (e) message valence; and (f) types of safety information cues/claims
4. What are the feedback and responses from the viewers of the safety and security YouTube videos posted by NTOs based on (a) YouTube response metrics (number of views, likes, dislikes and comments); and (2) comments sentiments: positive, negative, neutral and irrelevant)?

Literature Review

Social Media Use in Tourism Industry

Social media are interactive digital tools that feature content users may generate, manipulate, or influence. Social media are conducive to timely, interactive communication

and foster dialogue and content exchange among message consumers and creators (Seltzer & Mitrook, 2007; Taylor & Perry, 2005; Wright & Hinson, 2009). With ever growing number of users, social media has become a popular platform among various industries, including tourism. A content analysis of 165 journals related to social media use in tourism conducted by Zeng and Gerritsen (2014) found that tourism organizations and tourists use social media: (i) to share travel experience through development of user-generated content (UGC), (ii) to seek information on travel destinations and tourism services, (iii) to market and promote destinations, and (iv) for tourism crisis communication. As an industry that mainly provides services, tourism relies heavily on information trade between tourists and tourism organizations. Among tourists, social media ranks as the fifth most preferred channel among fifteen different information sources (Schroeder, 2012).

Tourism industry is highly vulnerable to many types of risks including economic, political, environmental and societal (Faulkner, 2001). Within this context, social media is increasingly being used to assist various tourism stakeholders in communicating and delivering information about a crisis (Sigala, 2012). Disaster and emergency communication activities include warning, mobilizing, and instructing the population; interacting with affected population in order to gather data, provide help, and give psychological aid; and increasing the population's situation awareness and community resilience (Resnyansky, 2014). Social media has the potential to influence the way individuals think, behave, and respond to information and situations in general and in times of crisis (Paul, 2012).

Tourism is an information-intense industry; therefore, it is critical to understand changes in technologies and consumer behavior that impact the distribution and accessibility of travel-related information (Xiang & Gretzel, 2010). Shared information on social media sites is recognized as an important information source that may help tourists' travel planning or even eventually influence potential travelers' travel decision-making (Zeng & Gerritsen, 2014). Although it is clear that - for better or for worse - social media is very powerful, many executives are reluctant or unable to develop strategies and allocate resources to engage effectively with social media (Kietzmann et al., 2011). Hence, one of the objectives of the study is to quantify the utilization of YouTube platform by NTOs particularly in disseminating safety or risk-related information.

Role of Information on Destination Risk Perception

Destination management organizations such as NTOs have a vital role to play in ensuring that prospective tourists receive necessary information that would make them aware about potential safety and security risks at the destination. Researchers have suggested that not only is the tourism industry at risk in the event of a crisis, but tourists are also vulnerable because they are unfamiliar with their surroundings when away from home and are far from their social networks (i.e., friends and relatives) (Burby & Wagner, 1996; Phillips & Morrow, 2007; World Tourism Organization, 1998). Tourists are an at-risk group during a crisis because of insufficient knowledge to decipher communication messages and are typically in unfamiliar places and lack support systems accessible to them at home (Burby & Wagner 1996; Faulkner 2001; Matyas et al. 2011; World Tourism Organization 1998). One way to minimize this risk is to educate and inform visitors of possible risks that they might encounter at the destination and recommend safe behaviors they can engage in before or

during their travel experience. This would enable them to adopt risk reduction behaviors such as getting a vaccination prior to travel, using bug spray while in the destination and avoiding walking in certain districts after dark.

Prior studies have found out that destination image (e.g. Baloglu & McCleary, 1999; Beerli & Martin, 2004; Phau, Shanka & Dhayan, 2010) and risk perception (e.g. Lepp & Gibson, 2008; Reisinger & Mavondo, 2005; Kozak, Crotts & Law, 2007) are influential factors in destination preference, travel behaviors and travel intention. Perceived risk is generally conceptualized as ''the consumer perceptions of the uncertainty and adverse consequences'' about a product or service (Dowling & Staelin, 1994). In tourism, risk perceptions can be more influential in a tourist's decision making than the real conditions at the destination or region (Sönmez & Graefe, 1998a). Travelers may alter their travel plans and seek an alternative "safer" destination when the media increases the amount of coverage of an incident or negative event associated with a destination (Sönmez & Graefe, 1998a; Sönmez & Graefe, 1998b).

While destinations have the responsibility to provide safety-related information, less is known on the effects of safety-related information on tourists' risk perception and in what perspective tourists digest information when it comes to safety-related information. For example, information on crime safety guidelines would make tourists aware of the potential risks and ways to avoid the risks, but does it also cause them to perceive higher crime risk at the destination? It is one of the gray areas in risk perception that requires investigation. Because most people lack direct experience with violent crime, the media might also act as an important source of information about the nature of crime (Gerbner & Gross 1976). Perceptions of crime and safety are influenced by a person's conditioning to safety, the image portrayed of a destination, and the way in which the media influences perceptions of risk that can affect tourism visitation and restrict behavior based on the nature and level of reporting of crime (Barker & Page, 2002). In the case of tourist's safety and security video, it could be a double-edged sword. For one, such videos may be useful to inform tourists about potential risks and reminding them to be more vigilant, but it might also create risk perceptions that could hinder potential visitors to travel to the destination.

Creating a Persuasive Message as Risk Reduction Strategies

NTOs may use a variety of ways to present the safety and security information that would influence how viewers process that information. Hence, the study intends to accumulate data on the way the message and contents of the videos were developed by referring to several variables used in persuasion theory. Numerous studies in public relations, marketing, and health communication have examined various persuasion factors that would enhance the effectiveness of a message. These factors include from the perspectives of the sender characteristics (e.g. *source credibility*: Gotlieb & Sarel, 1991), message characteristics (e.g. *modalities*: Liu & Stout, 1987; *framing* – Rothman & Salovey, 1997) and recipient characteristics (e.g. *personality traits* – Hirsh, Kang & Bodenhausen, 2012). Miller (1980) defines persuasive communication as any message that is intended to shape, reinforce, or change the responses of another, or others (Stiff & Mongeau, 2016; p.4). Conceptually, risk-, safety- and crisis-related information can be considered as a type of persuasive communication because the main objective of this information is to influence audiences to

adopt a certain position and belief (such as for image/reputation recovery) and even to encourage the audience to take certain course of actions (such as for evacuation, safety behaviors) (Reynolds & Seeger, 2005; Yang, Kang & Johnson, 2010). Similarly, the effectiveness of crisis communication is affected by factors that affect the ability to persuade audiences (Arpan & Pompper, 2003).

A small but growing body of empirical work in risk communication and related fields has investigated the effects of different message formats (e.g. Johnson et al., 1988; Fisher et al., 1992; Gonzalez & Wallsten 1992; Kaplan et al. 1986; in Bier, 2001; p.140). Early studies on the effects of communication modality in persuasion showed large inconsistency in their findings (Mohammadi et al., 2013). For example, while Frandsen (1963) found that videotaped messages are more persuasive than audio-taped messages and writing messages are the least persuasive, other studies suggested no difference or greater persuasiveness in writing messages (Werner, 1982). Arguably, the attractive packaging of the information may also influence the persuasive effectiveness (Krahmer, van Dorst & Ummelen, 2004). Illustrations in instructional text can have variety of effects; they may add to reader interest and enjoyment, as well as affecting attitudes and arouse emotional response (Levie & Lentz, 1982).

While there are many studies can be found on the role of message framing and appeals in advertisement and health communication fields, there is a paucity of similar studies focusing on safety information, especially in the context of tourism industry. Media scholars note that key to understanding the potential media effect on perception of risk is the way in which hazardous events are framed (Hove, Paek, Y., & Jwa, 2015; Hughes, Kitzinger, & Murdock, 2006; Marks, Kalaitzandonakes, Wilkins, & Zakharova, 2007; Kapuściński, & Richards, 2016). According to recent findings in communications research, framing serves as an important component of a person's information-processing and decision-making behavior (Burnside, Miller & Rivera, 2007). The type of message appeal is a message characteristic that may influence persuasion (Paek, Kim & Hove, 2010). Studies on relative effects of different message appeals also have a long history in persuasion research (Liu & Stout, 1987).

Theoretical Lens: Elaboration Likelihood Model (ELM)

The context of the study emphasizes on various characteristics of safety videos posted by NTOs on YouTube including the presentation styles and contents strategies. These characteristics may play a role on the effectiveness and persuasiveness of the contents. As described by McGuire (2001), certain elements of a communication might be designed primarily to capture attention, whereas other elements would influence important attitudes that are determinants of the behavioral outcome (Rimer & Kreuter, 2006; p.191). Within the foundation of persuasion theory, *Elaborations Likelihood Model (ELM)*, developed by Petty and Cacioppo (1986) is used as theoretical guiding principles for the study.

The ELM seeks to understand the processes that lead to attitudinal and behavioral change (Petty, Brinol & Priester, 2009). The model provides an organizing framework for persuasion that goes beyond the traditional approach in which persuasion requires active information processing and cognitive effort (Kitchen, Kerr, Schultz, McColl & Pals, 2014; Petty, Brinol & Priester, 2009). Instead, ELM holds that persuasion can occur with both active

(central) and inactive (peripheral) information processing (Petty, Brinol & Priester, 2009). The model suggests two routes of information (or elaboration) process; *central route* or *peripheral* (*heuristic*) route. The *central* route requires a person to think critically about issue-related arguments in an informational message and scrutinize the relative merits and relevance of those arguments prior to forming an informed judgment about the target behavior (Bhattacherjee & Sanford, 2006). The *peripheral* (or *heuristic*) route, on the other hand, involves only limited elaboration; the receiver pays more attention to *peripheral* cues, such as the presence of a credible source ('experts are always right'), the number of *prima facie* plausible arguments ('more arguments are better') and lay-out ('a nice design is more convincing') (Krahmer, van Dorst & Ummelen, 2004). ELM explains that when there is an overload of information, peripheral processing is most likely to be used (Xu & Zhang, 2018).

In the context of social media, the abundance of information available to users may cause information overload. Online messages are often combined with visuals, audio, feedback from others through comments or likes, and in some cases advertisements. Moreover, the abundance and speed in which information is disseminated increases the difficulty of processing that information. Due to this online environment, social media users are more likely to rely on peripheral cues (Xu & Zhang, 2018). Xu and Zhang (2018) also discuss that similar peripheral processing occurs with crisis information as there is a need to fulfil emotional and informational needs (p. 200). Therefore, risk or crisis information provides online should be formulated to appeal to the peripheral cues of receivers. In regard to destination safety and security information, tourists may be more receptive to messages that arouse their affective states and include appealing visual elements (Xu & Zhang, 2018), such as through videos on YouTube.

The study adopts a content analysis approach. Hence, it is beyond the scope of the study to examine individuals' cognitive process when viewing safety YouTube videos posted by NTOs. Rather, the study seeks to describe on the peripheral messaging cues and other persuasive content strategies adopted by NTOs in the development of the safety videos.

Method

The investigation involves a census technique in acquiring the safety and security videos posted by destination management/marketing organizations (DMOs) at national level (or NTOs as used in the study) in their official YouTube channel as well as a content analysis approach to analyze the videos' in terms of presentation styles, contents characteristics and, viewers' feedback and responses. For the study, the conceptual definition of DMOs (*also interchangeably known as Destination Management Organizations) is based on UNWTO's terminology:

> *"The leading organizational entity which may encompass the various authorities, stakeholders and professionals and facilitates tourism sector partnerships towards a collective destination vision. The governance structures of DMOs vary from a single public authority to a public/private partnership model with the key role of initiating, coordinating and managing certain activities such as implementation of tourism policies, strategic planning, product development, promotion and marketing and convention bureau activities"* (UNWTO, 2018[a]).

YouTube was selected as the social media platform because as of March 2018, YouTube is the second most popular social network site and most popular video-sharing network worldwide with 1.5 billion active users (Statista, 2018) including individual users, companies and non-profit organizations. YouTube videos can also be easily shared across other social media platforms. YouTube provides a unique context in which to study safety and security information as the platform focuses of audio-visual content and provides users with multiple opportunities to engage with the content, including commenting, liking and disliking.

Videos Searching and Analysis Process: Identifying NTOs

Based on the United Nation World Tourism Organization (UNWTO) list of *Member States* and *Associate Members*, a total of 162 countries, in addition to seven countries that are not in the list; United States of America, United Kingdom, New Zealand, Singapore, Finland, Ireland and Belgium were selected as the basis to find safety and security videos. As the United Nations specialized agency focused on tourism industry, members in the UNWTO are generally consisted of the highest tourism authority (NTO) for each country. UNWTO website (UNWTO, 2018[b]) provides contact details of their members including relevant tourism websites for each country. For example, the "Regional Information" (Figure 1) on Albania provides two website links; (i) The website of the governmental department responsible for managing tourism in Albania and (ii) the official tourism (marketing) website. Google search was used to find "the official tourism website" if the website link is not provided in the UNWTO member database, and for the additional seven countries not in the UNWTO list (e.g. Singapore Official Tourism Website).

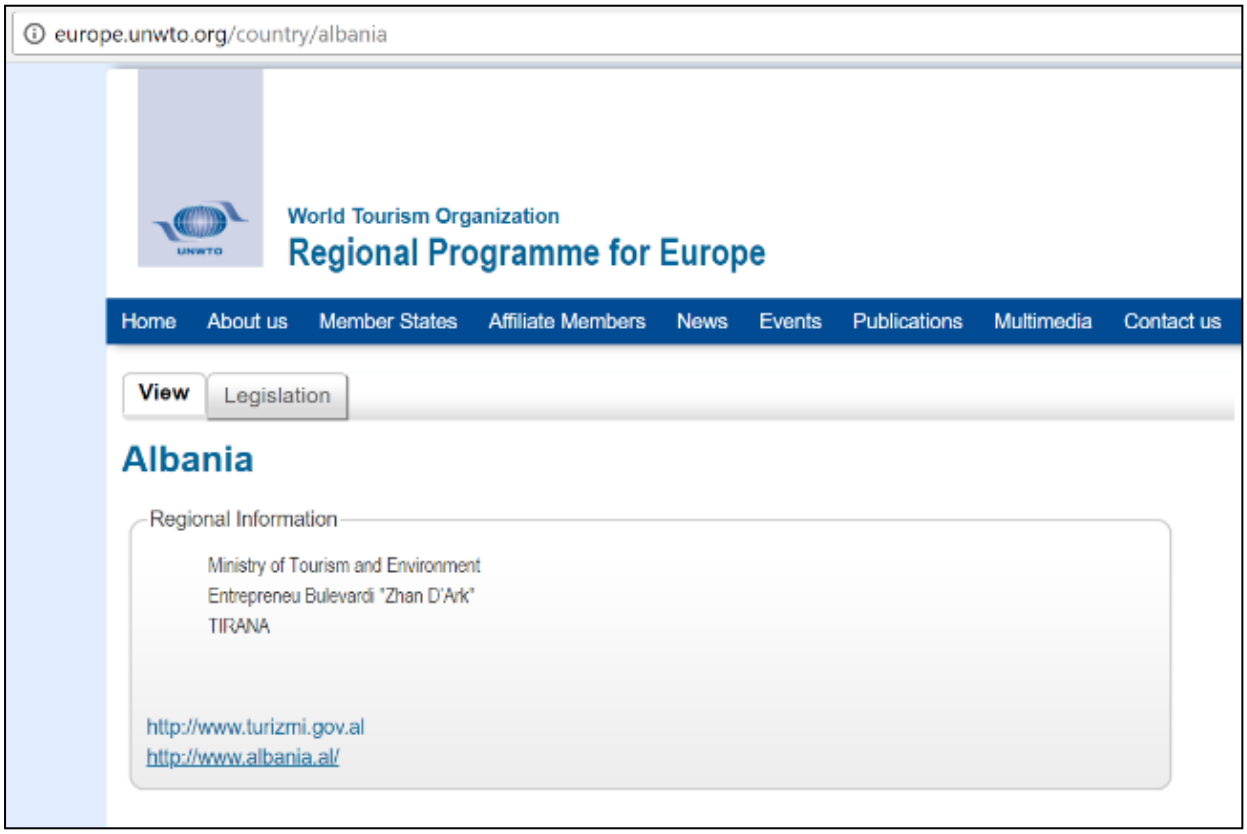

Figure 1: Regional Information for Albania in UNWTO's website

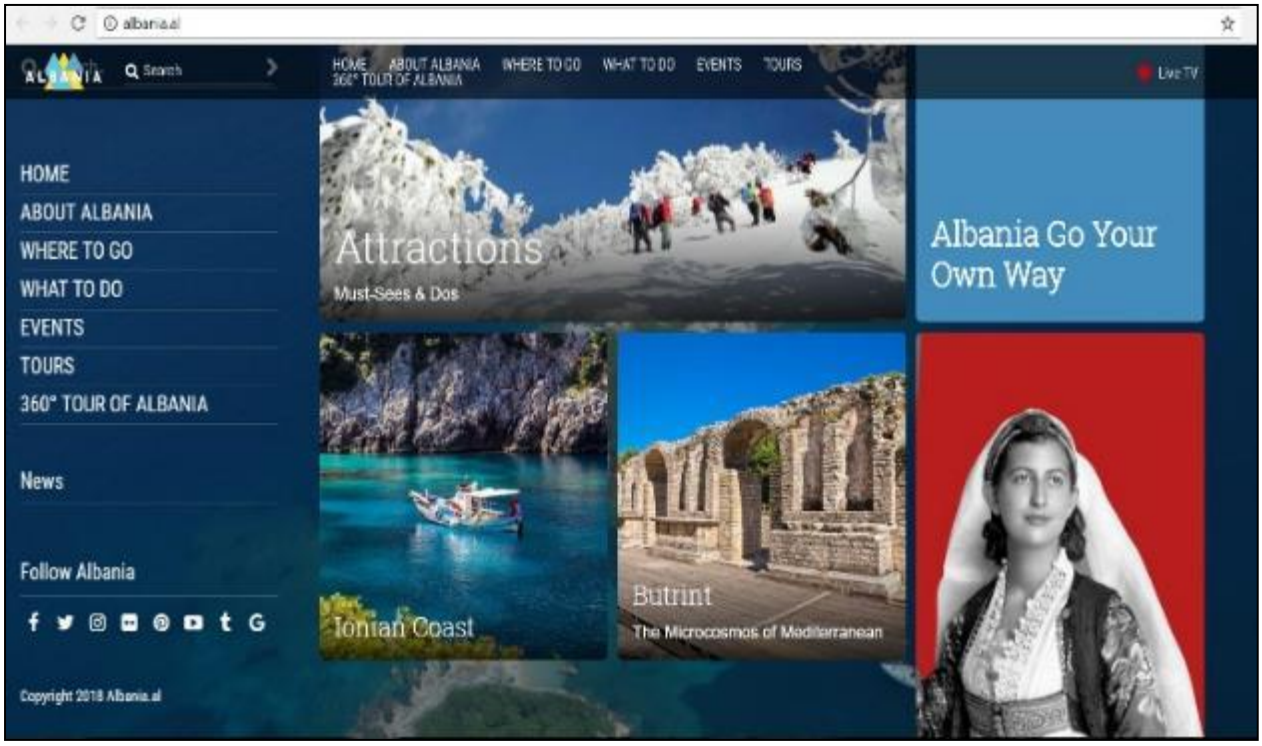

Figure 2: The Official Tourism Marketing (Visit Albania)

Searching for safety and security videos

The official tourism website for each NTO was reviewed to find the link to the NTO's official YouTube channel. For example, in Figure 2, the link to *Visit Albania's* official YouTube channel is provided at the bottom left of the website. If the link to the YouTube channel is not provided in the website, a manual search on YouTube was performed. The name, logo, and channel description of each YouTube account was thoroughly examined to ensure it was owned/managed/affiliated with the official NTO. All the videos uploaded by the NTO channel were reviewed. The videos with an English title and those which had explicit/implicit connotation to safety and security including safety risks, safety/security measures, and other relevant contexts (e.g. "*How to dress right and enjoy the winter*?" and "*Visit Nepal after the Earthquake"*) were included in the study. Figure 3 provides an example of two safety videos (highlighted by a red-line box) found in the *Visit Cyprus*'s YouTube channel.

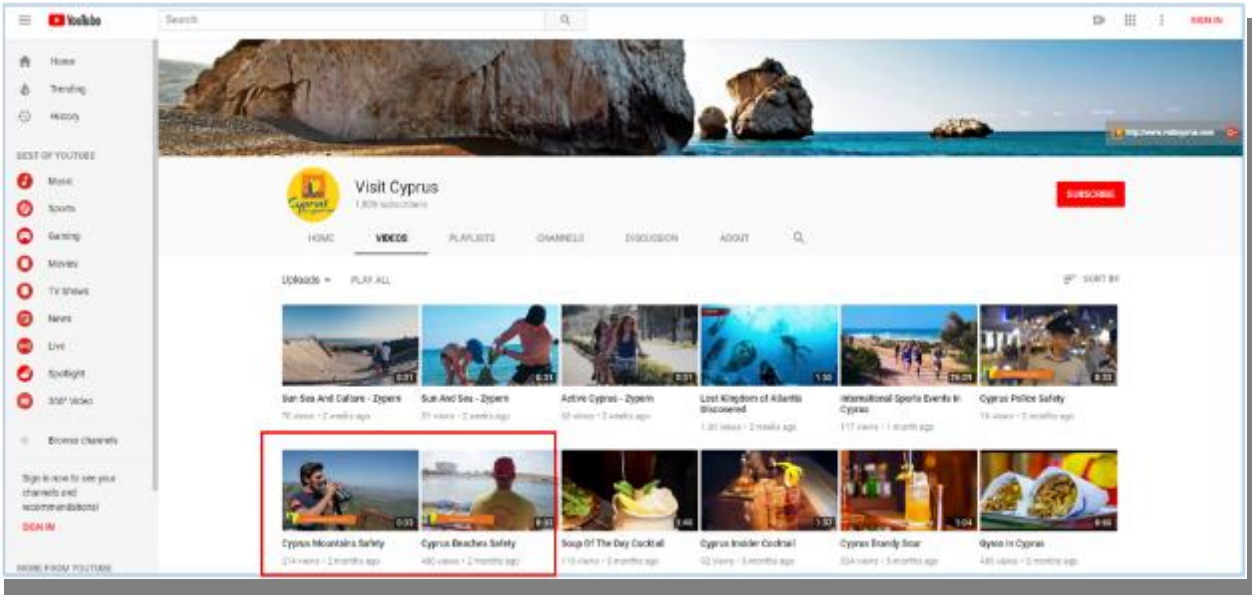

Figure 3: The official YouTube channel for Visit Cyprus

Videos that provide information about safety and security issues at the destination uploaded in NTOs' Official YouTube Channel were the unit of analysis in this study. Each of the videos was analyzed and coded using the categories and the variables listed in Table 1. Apart from the author as the main coder, a secondary coder was hired to analyze the YouTube safety videos. A training session was conducted by using a YouTube safety video uploaded by a local level DMO. After the training, both coders were assigned to code two safety videos (not included in the study) for a pre-test session. The discrepancies/disagreement found in the pre-test were discussed and rectified. The main coding activity involved six videos (20% of the total cases) that were randomly selected based on an online random number generator website (Stattrek, 2018). The average for intercoder reliability was .81. Analysis was generated by using SPSS.

Table 1
Description of Coding Variables

VARIABLE	DESCRIPTION
Source	**The source or creator of the video. NTOs may upload a content from other sources.** *5 categories: Official NTO, Other travel and tourism-related organization, Non-tourism organization, Tourists and Other*
PRESENTATION STYLE ATTRIBUTES: *The audio and visual characteristics of the video*	
Visual Style	**The main type of graphical presentation/feature of the video.** *5 categories: Looks like user-generated content, Formal advertisement, News clip, Part of broadcast programs and Other.*
Information Delivery Style	**The way of describing and explaining the safety and security risks/measures.** *9 categories: Voice-over/subtitle, Voice-over/No subtitle, Speaker Presence/Subtitle, Speaker Presence/No subtitle, Subtitle only, Interview with tourists, Interview with tourism officials, Interview with non-tourism individuals and No narration.*
Audio Style	**The use of music (e.g. Songs and melody).** *3 categories: With music, Without music and Mixed use.*
CONTENT ATTRIBUTES: *Types of safety information and message development strategies*	
Types of Safety and Security Risks (Adapted from Pennington-Gray & Pizam, 2011; Boakye, 2010)	**Implicit and/or explicit safety and security risks/disasters featured in the video.** *6 categories: Crime, Natural disasters, Technological/Man-made disasters, Health-related disasters, Conflict-based incidents and Not Presented/unidentified*
Types of Safety and Security Measures (Adapted from UNWTO, 1997)	**Implicit and/or explicit safety and security measures featured in the video.** *12 categories: Self-protection recommendation, Policing, Fire prevention, Health/medical assistance, First-aid/emergency services/hotline/lifeguard, Complaint service, Evacuation plan/process, Insurance, Public signs/symbols, Special care visitors service, Mixed types of measures and Not presented/unidentified.*
Message Framing	**The approach used to construct the message by highlighting the outcomes of adherence or non-adherence of the safety recommendations**. *4 categories: Gain, Loss, Neutral/unidentified and Mixed approaches.*
Message Appeals (Adapted from Paek, Kim, Hove and Huh, 2014)	**Message attributes that are used to draw viewers' attention, influence their emotions and attitude change.**

	5 categories: Economic, Psychological/Fear, Social, Physical and Not presented/unidentified.
Message Valence (Adapted from Paek, Kim, Hove & Huh, 2014)	**The type of emotional /psychological value of the message.** *6 categories: Positive, Negative, Neutral and Not presented/unidentified*
Types of Safety Information Cues	**The safety themes/issues/topics highlighted in the video.** *8 categories: Self-protection recommendation, Safety measures, Overall destination safety, overall safety of region, Possible risks at the destination, Personal stories/testimony on safety, Safety procedures, Mixed themes and Other.*

FEEDBACK AND RESPONSES: ***Viewers' reactions of the video***	
YouTube Metrics	**Number of views, likes, dislikes and comments**
Comment sentiments	**Viewers' attitudes and feeling about the video.** 4 categories: Positive, Neutral, Negative and Irrelevant

Results

Research Question 1: The number of safety videos posted by national DMOs on YouTube.

Initially, 32 safety videos were identified. However, three videos were excluded in the final analysis due to their removal from the YouTube channels at the time of coding. The study therefore involved content analysis of 29 videos uploaded by 11 NTOs from Bangladesh (n=1), Cyprus (n=3), Egypt (n=4), Finland (n=2), Nepal (n=1), New Zealand (n=1), Peru (n=2), Philippines (n=1), Thailand (=7), Yemen (n=4) and Flanders (n=3). This represents only 6.5 percent of total NTOs population set up at the beginning of the study. In terms of source of content, 76 percent (n=22) of the videos were originally produced by the NTOs. The remaining videos, however, were produced by external agencies such as other travel and tourism organizations and news agencies.

Research Question 2: Presentation style attributes

The mostly adopted visual style for the videos is "advertisement" style (73%, n= 21), followed by "user-generated content" style (24%, n=7). Information was delivered most frequently with "voice-over" style (30 percent, n=10) and supplemented with "subtitle/textual" display (52 percent, n=17). As the videos were titled in English, it is not surprising to find out that the language was commonly used in verbal and/or subtitle/textual display (70 percent, n=23) as opposed to local language (21 percent, n=7). Interestingly, 10 videos use non-verbal format; subtitle only (17 percent, n=5) or visual only (17 percent, n=5). Majority of the videos (55 percent, n= 16) include music background for the entire duration of the video.

Research Question 3: Content/message attributes

Table 2 provides the summary of coding results for variables describing the characteristics of the safety information and the message persuasion strategies used by DMOs. Highest frequency is highlighted in bold and choice categories which scored 0 were excluded. Conflict-based incidents (23 percent, n=7) were the most frequent risks presented in the videos; wars and revolutions (n=5), riots (n=1) and act of terrorism (n=1), followed by

natural disasters (20 percent, n=6); flood (n=5) and earthquake (n=1). Safety measures were not verbally or visually presented in the majority of the videos (33 percent, n=12). Information for visitors about self-protection behaviors were generally common (28 percent, n=10) as compared to other information on safety measures. Self-protection behaviors (25 percent, n=8), information on safety measures (25 percent, n=8) and information on the destination's overall safety (25 percent, n=8) are the most common types of safety information cues/claims highlighted in the videos. Message persuasion strategies opted the most by NTOs were neutral frame (55 percent, n=16), psychological appeal (73 percent, n=21) and positive valence (62 percent, n=18).

Research Question 4: Feedback and responses

At the time of coding, the highest number and lowest number of views, likes, dislikes and comments recorded are 171,288 and 48; 135 and 0; 27 and 0; and, 86 and 0, respectively. Analysis of comments sentiments was unable to be descriptively reported due to majority of the videos (62 percent, n=18) having no comments and a very low agreement reliability between the two coders. This was likely due to the comments not being directly related to the content of the video.

Table 2
Summary Result for Content/Message Attributes

CONTENT ATTRIBUTES		n	%
Types of Safety and Security Risks* *(n=30)*	• Crime	3	10
	• Natural Disasters	6	20
	• Technological/Man Made Disasters	5	17
	• Health-related Disasters	4	13
	• **Conflict-based Incidents**	**7**	**23**
	• Not Presented/Unidentified	5	17
Types of Safety and Security Measures*(n=36)*	• Recommendation of actions for self-protection (e.g. dressing, safe box,)	10	28
	• Police protection of visitors	4	11
	• Health/medical assistance	2	6
	• First aid, emergency services and hotlines (including lifeguards)	1	3
	• Signs and public information symbols	3	8
	• Consideration for special care visitors (travelers with disabilities)	3	8
	• Other	1	3
	• **Not presented/Unidentified**	**12**	**33**
Message Framing *(n=29)*	• Gain	7	24
	• Loss	6	21
	• **Neutral**	**16**	**55**
Message Appeals *(n=29)*	• Economic	1	3
	• **Psychological**	**21**	73
	• Physical	7	24

Message Valence *(n=29)*	• **Positive** • Negative • Neutral	**18** 4 7	**62** 14 24
Types of Safety Information Cues / Claims* *(n=32)*	• **Self-protection behaviors** • **Information on safety measures** • **Information on the destination's overall safety** • Information on the possible risk(s) at the destination • Safety procedures • Other	**8** **8** **8** 5 2 1	**25** **25** **25** 16 6 3

**Coders were allowed to select more than one category.*

Discussion

The purpose of this study was to examine the use of YouTube for delivering information about destination safety and security. The main interest was to discover both the number of NTOs using YouTube for this purpose, and how they are using the social media platform. Exhaustive search of 169 countries reveals an extremely low usage of the platform among the NTOs. While this finding may indicate that DMOs are not providing information on safety and security, this could also mean that YouTube is not a preferable platform for dissemination of destination safety-related information. Such information may be provided by NTOs through other platforms or formats such as official tourism website, brochures, magazines, etc. Based on risk perception literature, it can be assumed that DMOs may have a concern uploading safety information on YouTube as to avoid negative perception about the destination. YouTube is predominantly used by NTOs for marketing purposes. While, the platform can also be an effective medium to disseminate information about safety and security due to its popularity, such information may be only applicable to prospective tourists who seriously considering visiting the destination or tourists at the destination. Other platforms such as NTOs website and brochures distributed at entry-point (e.g. airport) may be deemed sensible.

Audio-visual characteristics may influence overall effectiveness of a message. According to ELM, individuals may process information based on peripheral (heuristic) cues (Petty and Cacioppo, 1986). Hence, in developing the safety information videos, DMOs typically use advertisement style in presenting the safety information. The study defines "advertisement style" as a formal, structured video with high quality professional recording and editing such as graphic animations, audio synchronization, sound effects, image transitioning, etc. This visual style would help in generating positive credibility perception among the viewers. Additionally, music background was employed in majority of the safety videos. The role of music is an important element in advertisement according to advertising and branding literatures (e.g. Alpert, Alpert & Maltz, 2005; MacInnis & Park, 1991; Bruner, 1990) due to its ability to evoke certain emotion and trigger memory.

In terms of information content or message, YouTube was mainly used to provide information on self-protection recommendations and safety situation at the destination. Interestingly, wars and flood are two types of safety risks frequently informed in the safety videos. Closer examination reveals that *Amazing Thailand* and *Yemen Tourism Promotion Board* were more likely to use YouTube to provide situational update on the destination. This strategy could be effective for tourism recovery especially due to media coverage on a crisis event at the destination. However, it may be appropriate to remove these types of safety videos after a period of time as to mitigate risk perception. Safety measures were not highlighted for majority of the safety videos in the study. It is unknown whether information safety measures could evoke a positive or negative safety risk perception about the destination. For example, information on tourist police may provide a peace of mind for tourists but it could also raise a question about the general safety of the destination. Some people might perceive that the destination has a high crime rate involving tourists, and therefore, tourist police were assigned. Generally, neutral frame, positive valence and psychological appeal were mostly adopted as the message persuasion strategies. A video is categorized as "neutral-framed" when the content does not provide information about neither benefits nor the consequences of abiding or disregarding the safety and security measures/behaviors. More than half of the videos provide safety information about the destination (e.g. measures, possible safety risks and overall safety) which contributed to the high number of neutral frame use. Positive valence (the overall impression of the videos leans towards positive emotions such as happy and love) and psychological appeals (the video content could boost one's self-confidence and self-esteem such as the feeling of security) are sensible messaging strategies as to minimize or mitigate negative safety risk perception.

The study examines viewers' feedback and responses based on the YouTube metrics; number of views, likes, dislikes and comments, as well as examining viewers sentiments in the comment section. Based on the study by Paek et al. (2010), these metrics can be used to measured immediate response and popularity of YouTube content. Interpreting and making sense of social media metrics were the biggest challenges faced in the study. It is hard to tell if a video is more popular or effective than the others because there is too much variability in the overall viewers' response. For example, a video from *100% Pure New Zealand* has the highest number of *views* (171,288) but received a low number of likes (28), as compared to the video from Visit Finland, which has much lower number of *views* (52,265) but with much higher number of *likes* (135). It can be more complicated if number of *dislikes* and *comments* were added into the factors to determine video effectiveness or popularity. Additionally, there are many other factors that might contribute to the popularity of a YouTube video. In the case of the video from *100% Pure New Zealand*, it received a very high number of *views*, probably due to its short duration (25 seconds), the popularity of New Zealand as a tourism destination and the video features a popular actor. As mentioned in the previous section, comment sentiment analysis was excluded due to lack of data and very low reliability scores. Additionally, most of the comments were found to be irrelevant to the context of the message or information presented in the video or the comments were using non-English language.

Conclusion

Providing safety information to tourists is crucial due to the rise of crisis events in recent years. With the popularity of social media usage among tourists and tourism

organizations, YouTube offers an interactive avenue for NTOs to effectively disseminate safety information. The findings of the study show that only a fraction of NTOs are using YouTube for the purpose. Safety information would make tourists to be aware of possible safety risks at the destination and encouraging them to stay safe. It also could trigger negative safety perception or unsafe image of the destination. Audio-visual and message characteristics have an impact on individuals' information processing. Thus, NTOs could use appropriate persuasion strategies in order to enhance the effectiveness of the safety videos and reducing risk perception.

Limitations and Further Research

The study only examines safety videos with English title shared by NTOs on YouTube. Although, census technique was used in gathering the cases, generalization is restricted within the scope mentioned above. The study excludes safety videos with non-English (local language) title and local level DMOs. It also important to note that this study uses time-sensitive contents and variables for the analysis, therefore, DMOs may remove or add safety videos at any time. Not only that, social media metrics (e.g. number of views, likes, dislikes and comments) can be constantly changing from time to time. Hence, the validity of the findings would be subjected to removal or addition of safety videos. Future research could explore safety information produced by DMOs at local level (state level of a country) or with different modalities (e.g. text in DMOs website) or platforms (other social media platforms / DMOs official website).

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