Abstract: Today, Facebook users produce around four million likes per minute and publish more than three million posts every minute. A lion share of these posts and likes are concerned with tragedies happening all around the globe such as the Paris attack of 2015 or the terror attack in Barcelona of 2017. This study investigates why people post and share tragic news and how this communicative behavior relates to users' political activity. Drawing upon uses and gratifications theory as well as on the online political self-efficacy (OPSE) scale, we surveyed Facebook users (N = 314) and found out that the level of OPSE was significantly correlated with the Likelihood of posting tragic news on Facebook. We also explored what needs are associated with users' willingness to post tragic news on Facebook.

Key words: social media; tragic news; uses and gratifications; political self-efficacy; posting behavior.

Introduction

Today, there are about 1.18 billion daily active Facebook users (Facebook, 2016). The social media website that was created to connect classmates provides Internet users with many more opportunities. Thanks to Facebook, billions of people have equal rights not only to access information but also to produce content. Today, a post written by a teacher from a small Canadian village can gain as much attention as national media (Mashable, 2016). In fact, Facebook users produce about four million likes per minute and publish more than 3 million posts every minute.
(Kimmorley, 2015). A lion share of these posts and likes are concerned with tragedies happening all around the globe.

People publish and share millions of posts about terror attacks, earthquakes, shootings, deaths of their favorite stars, and other tragic events (Yearinreview, 2015). In response to the trend, Facebook offered their users several ways to express their feelings and to stay in touch with their friends or even unknown people in case of crisis. For instance, in 2014 Facebook announced a launch of a new “safety button” feature that enables people from regions affected by a tragedy (e.g. terror attack or tsunami) to mark themselves as “safe”. Moreover, in 2015, Facebook enabled users all over the world to express their feelings about Paris attack by posting a temporary profile picture with the French flag. Besides that, the features of hashtags and “trending topics” had a great impact on how people post and what posts users can reach. Today, anyone attaching a certain hashtag to their posts makes the posts visible to millions of people that click on this hashtag. In case of tragic news, the hashtags become viral (e.g. #Prayforparis, #prayforbruxel) thus creating sort of “community” of those who expressed their thoughts and feelings about a tragedy through Facebook. Ultimately, all these Facebook features made millions of posts about tragic events more visible. Millions produce or share content and change their profile pictures to express their feelings regarding tragedies, and in the process, contribute to the social media agenda.

This communicative behavior of social media users raises a number of questions. Why do people decide to change their profile pictures and/or use a hashtag on Facebook to share their feelings with others in the event of a crisis? Do they share tragic news to show their solidarity, to be a part of a trending community, to gain some sort of emotional relief, or for entertainment? Does Facebook activity of this type relate to a person’s political activity? To answer these
questions, we suggest applying Uses and Gratifications theory and an online political self-efficacy scale to the aforementioned communicative phenomena.

**Literature Review**

Although a number of studies were concerned with users’ social media posting motivations (see, e.g. Kelly, 2016; Kim & Sundar, 2016), there were no studies conducted to find out why users post tragic news specifically. However, the emerging trend of posting tragic news presents an intriguing communicative phenomenon worth investigating.

A Facebook post written by Isobel Bowdery, a girl who experienced the Paris attack in 2015, got about 800 thousand shares and almost three million ‘likes’ (Bowdery, 2015). After the attack, Facebook offered users the option to change their profile picture to the French flag to express their solidarity. Thousands of peoples decided to do so, while others also published their own thoughts about terrorism, Paris, or the increased fear of living in a violent world.

These posts provoked considerable debates about an appropriate way to express, or not express, one’s social or political position on Facebook. For example, some Russian Facebook users accused users from other countries, and specifically Mark Zuckerberg, of ignorance and indifference when Facebook did not offer the option to change profile pictures to the Russian flag following the Russian airplane crash that happened two weeks prior to the Paris attacks (BBC, 2015). Later, users complained to Mark Zuckerberg personally, by commenting on his status update about the attacks in Turkey in July 2016 (see Appendix B). Some users created alternative profile pictures to support those who died in attacks in other parts of the world (e.g. Beirut or Syria) and criticized Facebook for not building a ‘safety button’ for these places into the Facebook interface (Ng, 2015). Also, the media questioned the sincerity of social media solidarity (Judkis,
2015). Some even called changing of profile pictures “a superficial repetition of a publicly acceptable opinion” (Hodgson, 2015).

After the attack, Facebook users continued producing content intended to draw attention to the ‘wrong’ way to demonstrate support and solidarity online (see e.g. The Huffington Post, 2016). Such a vivid discussion evokes questions about the motivations of people who actually participate in posting of tragic news. We propose to analyze these motivations from the perspectives of political activism and uses and gratifications theory.

**Online political self-efficacy.** To explain political actions, scholars often apply the concept of internal political efficacy (IPE) (see e.g., Leung, 2009; Velasquez & LaRose, 2014). This concept describes someone’s faith in their ability to change certain political processes by their actions. Scholars also suggest online political self-efficacy (OPSE), a modified version of IPE, to study online behavior (Velasquez & LaRose, 2014). Research findings about whether internal political efficacy can be used to predict online actions have been inconsistent. For instance, a number of scholars (see, e.g. Leung, 2009; Wang, 2007) have claimed that IPE and OPSE are not able to predict online political activism or even the creation of Internet content. Velasquez and LaRose’s (2014) study about youth collective activism, on the other hand, revealed a positive correlation between OPSE and online participation.

In this study, we predict that OPSE is associated with posting tragic news on Facebook. However, the focus is on the connection between users’ OPSE and their likelihood of posting tragic events to Facebook. Thus, the emphasis will not be the content of user posts in regards to a tragic event. The post itself may represent any form of information about a tragedy, from a simple repost to declaration of a stand, or citing arguments for or against other users’ viewpoints. This hypothesis tests why people post tragic news on Facebook rather than how they do it.
**H1**: The higher level of online political self-efficacy users have the more likely they post tragic news on Facebook.

**Uses and Gratifications Theory**

Although the level of online political self-efficacy may be a relevant factor for posting tragic news on Facebook, we suggest that users also have many personal reasons for engaging in this behavior. Therefore, understanding of uses and gratification theory is relevant to this study.

Uses and gratifications theory is concerned with media effects on mass communication. The theory has its roots in the 1940s and has been developed and extended by various scholars, noticeably Herzog, Rubin, Katz, Blumberg, and Gurevitch (Nabi & Oliver, 2009). Uses and gratifications speaks to what people do with media rather than what media do to people. This theory suggests that people’s actions and choices are driven by needs and the goal of gratifying such needs. In other words, audiences actively seek gratification by making conscious choices (Katz, Blumler, & Gurevitch, 1973; Nabi & Oliver, 2009). When analyzing the Internet use, scholars consider several types of needs that users try to satisfy when engaging in Internet communication. Among motivations for Internet use and content generation, scholars name interpersonal utility, social needs, information seeking, recognition needs, and entertainment needs (Papacharissi & Rubin, 2000; Leung, 2009). It is worth noting that while information seeking proved to be the strongest motivator for Internet use in general (Papacharissi & Rubin, 2000), recognition and social needs proved to be the strongest motivators of content generation (Nardi et al, 2004; Leung, 2009). In this study, we suggest that uses and gratification theory can shed some light on Facebook users’ motivations for posting tragic news.

**H2**: The more gratification Facebook users get in posting/sharing a tragic content, the more likely they will post/share tragic content.
Methods

The following sections will give a detailed description of the procedures, sample technique, and overall measures of this study.

Participants

In this study, random sampling was used as the preferred sampling technique. A link to the Qualtrics survey was shared through the researchers’ personal Facebook pages which was also posted to specific Facebook groups, such "Wolfpack Students" and “NCSU Communication Graduate Student Association (CGSA)” to reach an even greater audience to make this study's sample more substantial and diverse in regards to the participants' demographics. Participants received no monetary compensation for completing this research. At any time during the procedure, participants might decide to discontinue participation. In order to be included in this research, individuals must have had a current Facebook account and be 18 years of age or older. The participants were asked to complete the demographic section and select from a set of options that best characterize themselves including: age, gender, race, education level, and employment status.

Procedures

The Qualtrics survey was available online for two weeks from September, 26, 2016 to October, 10, 2016. After collecting the data, the responses that took less than three minutes and more than an hour were eliminated to make sure that participants spent an appropriate amount of time on completing the survey. Mean values were imputed to missing data. The final sample included 312 participants (N=312). Participants who took the survey included 78 males, 232 females, and 2 participants who reported their gender as “other”. The participants were ranged
from 18 to 50+ years of age. 46.2% reported to have graduate degrees, 33.6% had undergraduate
degrees, 13.8% of the participants had no degree, 3.8% held associate degree, 2.6% of participants
were high school graduates.

**Measures**

In the beginning of the survey, we asked the participants if they had an active Facebook
account i.e. if they used their account at least once over the last month (including browsing friends’
feed, posting or sharing any information). Only the data gathered from participants with active
accounts were analyzed. Three scales were utilized when constructing the survey: OPSE scale,
Uses and Gratifications scale, and a scale aimed to define the likelihood of posting tragic news.

**Predictor variables:**

**OPSE.** The scale was based on the scale of online political self-efficacy (OPSE). This nine-
item scale (see Appendix B) proved to be a reliable tool for measuring online behavior. The
Cronbach alpha reported by previous studies was of .96 (see, e.g., Velasquez & LaRose, 2014). In
our study, the scale also proved to be reliable with the Cronbach alpha of .92.

**Gratifications of Facebook content generation.** The second part of the survey was based
on a questionnaire previously used to measure people’s motivation for generating Internet content
(Leung, 2009). This questionnaire consists of 16 items (see Appendix B) and it proved to be an
efficient tool for measuring user motivations to produce online content. The items were grouped
in four blocks: questions regarding recognition needs that reflect the way users generate online
content in order to establish their expertise in a certain topic; questions regarding cognitive needs
that reflect how users exploit the Internet to seek for new information; questions regarding social
needs that reflect if people consider the Internet to be the right place to share their views with their
friends and family members; and questions about entertainment needs that reflect if people
generate content to have fun and pass time. Composite measures for each block of the scale were calculated. The Chronbach alpha of the Recognition needs block is .78. The Chronbach alpha of the Cognitive needs block is .78. The Chronbach alpha of the Social needs block is .70. The Chronbach alpha of the Entertainment needs block is .70.

Criterion variables:

**Likelihood of posting tragic news.** Participants were given a 5-point Likert scale (1 = very unlikely; 5 = very likely) to report the likelihood of posting different types of tragic news on Facebook. The scale consisted of 12 items which were based on previous studies regarding tragic news (see, e.g., Hoffner et al., 2009) and a list of trending topics of 2015 reported by Facebook (Yearinreview, 2015)\(^1\). We also added two items (“personal tragedy” and “the death of a popular star”) which seem to be relevant to our study. We asked a hypothetical question (see Appendix B) similar to Karl, Peluchette and Schlaegel’s (2010) research. The final scale proved to be reliable with the Chronbach alpha of .94.

**Analysis**

The results of the survey were tested using correlation and regression analyses. SPSS was used as statistical analysis software. For H1, a one-tailed correlation analysis was used to define if the likelihood of posting tragic news is associated with a level of online political self-efficacy. A single linear regression analysis was then conducted to determine if the level of OPSE actually predicts the likelihood of posting tragic news. For H2, one-tailed correlation analyses were applied to investigate the relationship between the likelihood of posting/sharing content about a tragic

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\(^1\) The list of trending topics is based on “how frequently a topic was mentioned in Facebook posts made between January and December 2015” (Yearinreview, 2015).
event and different types of users’ needs of gratification. The regression analysis was used to see if the level of a certain type of gratification predicts the likelihood of posting tragic news.

**OPSE and Likelihood of posting tragic news on Facebook**

As expected, the level of OPSE was significantly correlated with the Likelihood of posting tragic news on Facebook $r(312) = .233, p < .000$. The simple linear regression analysis with a level of OPSE as the predictor variable and the likelihood of posting tragic news as the dependent variable showed that the level of OPSE can be a significant predictor of the likelihood of posting ((F1,310) $= 17.773, p < .000$) with an $R^2 = 0.054$.

**Uses and Gratifications and Likelihood of posting tragic news**

The first correlation test analyzed the relationship between *Recognition needs* of Facebook users and the likelihood of posting tragic news. The variables proved to be significantly correlated $r(312) = .127, p < .025$. The second correlation test analyzed the relationship between *Cognitive needs* of Facebook users and the likelihood of posting tragic news. The test demonstrated a significant correlation between the variables $r(312) = .232, p < .000$. The third correlation test was used to find out if there is any correlation between *Social needs* of Facebook users and the likelihood of posting tragic news. The test demonstrated a significant correlation between the variables $r(312) = .274, p < .000$. The fourth test was applied to analyze the relationships between *Entertainment needs* of Facebook users and the likelihood of posting tragic news. The test demonstrated a significant correlation between the variables $r(312) = .164, p < .004$. A multiple linear regression was calculated to predict the Likelihood of posting tragic news on Facebook based on Recognition needs, Cognitive needs, Social needs, and Entertainment needs. A significant regression equation was found (F(4, 307) $= 8.982, p < .000$), with an $R^2$ of .105.
However, only Cognitive needs and Social needs were significant predictors of the Likelihood of posting tragic news (see the Table below).

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a Dependent Variable: LikelihoodComp

Discussion

The current study examined possible motivations to why people post tragic news on Facebook. More specifically, the study analyzed if the likelihood of posting tragic news was associated with the level of online political self-efficacy and certain types of needs (recognition needs, cognitive needs, social needs, and entertainment needs). The level of OPSE, the level of Gratification and the Likelihood of posting tragic news were measured among 312 users with active Facebook accounts. Overall, the results showed that OPSE and two types of needs can be significant predictors of the likelihood of posting tragic news on Facebook.

Hypothesis 1.

After running the one-tailed correlation test and the single linear regression, the H1 was supported. Although only 5.4% of the variation in the Likelihood of posing tragic news on Facebook can be accounted for the level of OPSE, the level of OPSE still proved to be a significant predictor of the likelihood of posting tragic news on Facebook. This corroborates previous findings showing correlation between the level of OPSE and users’ online behavior (Velasquez & LaRose’s, 2014)
Hypothesis 2.

After running the one-tailed correlation tests and a multiple linear regression, the H2 was partially supported. The results show that only Cognitive needs and Social needs are significant predictors of posting tragic news on Facebook while Entertainment needs and Recognition needs are not significant predictors. The results reinforce the findings of previous studies that claimed social needs tend to be one of the strongest motivations for generating online content (Leung, 2009). However, the results question previous findings regarding recognition needs as a strong motivator for posting online (Nardi et al., 2004; Leung, 2009).

Conclusion

The results of the study reveal that the level of OPSE and certain types of gratification needs are associated with the likelihood of posting tragic news on Facebook. They also show that the level of OPSE and levels of cognitive needs, and social needs predict the likelihood of posting tragic news on Facebook. These results suggest that people who believe that they are able to impact the world around them are more likely to post tragic news on Facebook. Moreover, people share tragic news to get new information and to share their views with their friends and family.

Future research should go deeper into exploring the motivations behind posting tragic news on Facebook. Current findings about correlations between online political self-efficacy and posting tragic news raise a number of questions regarding possible correlations between political views and posting tragic news, associations between real life activism and posting tragic news, and users’ expectations of how their posts make or do not make a difference. The results about the various needs behind why people post tragic news on Facebook also raises a set of questions. First of all, while it is reasonable that posting tragic news is not predicted by entertainment needs, it would be interesting to investigate why people do not post tragic news to fulfill their recognition needs
especially since it contradicts previous studies (see, e.g. Leung, 2009). Second, social needs should also be further investigated. After all, what exactly makes people think that the Internet is the right place to share their views about tragic events with their families and friends? To answer this question, future research might focus on how people react on tragic news in their feeds. Questions future research might address include: how do they comment on tragic news posts, how do they post something in response to tragic news postings, and how and why do users praise or judge those who post tragic news on Facebook. It would be also interesting to look at the differences in posting habits among people from different countries.

Limitations

It is worth noting that the study has certain limitations. The first limitation of the study is the sample size and the diversity of participants. For instance, almost half of our participants held a graduate degree which could skew the data (e.g. people with graduate degrees do not use social media for entertainment and therefore the entertainment needs did not show a significant level of predicting the likelihood of posting tragic content on Facebook). More data would provide us with a more precise picture of whether the level of OPSE and specific needs are correlated with the likelihood of posting tragic news on Facebook and can predict the likelihood of posting tragic news.

Another limitation of this study comes from the international background of the researchers as many Facebook connections from the researches were from people with English as a second language. This could result in misunderstandings while reading and answering the survey. Besides that, due to the international background of the researchers, the participants might have had different backgrounds which could also affect the final results. The survey was shared by people from all over the globe including the U.S., Canada, Spain, Germany, Russia, Kyrgyzstan,
Netherlands, Italy, and other countries. We assume that people from different countries might have had different experiences related to tragic events which could affect their responses.

Despite all the aforementioned limitations, the study contributes to our understanding of users’ online behavior. Being both consumers and producers of information, Facebook users participate in creating current social media trends. Studying users’ motivations that stand behind certain types of posts will be helpful in explaining the sources of current trends as well as predicting changes in social media agenda.
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Appendix A

Online political self-efficacy (OPSE) scale, adapted from Velasquez and LaRose (2014), 9-item Likert-type scale \((1 = \text{strongly disagree}; 10 = \text{strongly agree})\).

For the following question, the higher the number you select the more certain you are about each statement (1 to 10). Please rate how certain are you that you can do the things discussed below by choosing the appropriate number:

1. Use social media applications to express your political views
2. Express coherently your political ideas to others online
3. Influence others online regarding a political issue
4. Use social media applications to obtain a political objective
5. Gather relevant online resources to express a political view
6. Argue effectively with others online
7. Use relevant information online to express your political views
8. Use the Internet to pursue your political purposes
9. Keep informed about political issues you care about using online social media sites and applications

Motives for user-generated content online (Leung, 2009). 5-point Likert scale \((1 = \text{strongly disagree}; 5 = \text{strongly agree})\)

I participate in content-generation on Facebook:

Recognition needs:
1. To establish my personal identity

2. To gain respect and support

3. To build up my confidence

4. Because it is satisfying

5. To promote or publicize my expertise

Cognitive needs:

6. To broaden my knowledge base

7. To find out what is going on in society

8. To understand events that are happening

9. To refine my thinking

Social needs:

10. To express my feeling

11. To share my views, thoughts and experience

12. To let my family and friends know my recent situation

Entertainment needs:

13. To pass time

14. Because I am curious

15. Because it is entertaining
Likelihood to post something on Facebook, adapted from Karl, Peluchette, and Schlaegel (2010).

5-point Likert-type scale (1 = very unlikely; 5 = very likely).

“How likely would you share this news on Facebook?”

1. War
2. Terror attack
3. Shooting
4. Sexual assault
5. Assassination
6. Accident
7. Airplane crash
8. Natural disaster (earthquake/tornado/storm/flood)
9. Personal tragedy (like the death of a family member)
10. The death of a popular star (musician/movie star/writer)
11. Humanitarian crisis
12. Economic crisis

16. Because it is trendy
Appendix B

Image 1: Screenshot taken of Mark Zuckerberg’s Facebook status update posted on June 29.