CRISIS COMMUNICATION DURING A #FESTIVAL EMERGENCY
INTRODUCTION

Disasters on the rise globally (UNISDR, 2016)

Emergencies at events pose risk to individuals, communities and organisations.

Tourism highly sensitive to disasters (Ritchie, 2004)

Disaster: “when one is confronted with sudden unpredictable catastrophic changes over which it has little control” (Faulkner, 2001, p. 136)

Emergency: a state in which normal procedures are suspended and extra-ordinary measures are taken in order to avert a disaster” (World Health Organization, 2002, p. 10)
Crisis communication contributes to reducing injury and loss of life (Takahashi et al., 2015).

Rise of social media necessitates its integration.

Social media use rises during a crisis (Pew Internet & American Life Project, 2006).

Communicating online during a crisis is complex but valuable during a crisis. (Schroeder, Pennington-Gray, Donohoe, & Kiousis, S., 2013)

5 billion mobile device users worldwide (Statista 2018)

330 million monthly Twitter users worldwide (Statista 2018)
The Social Mediated Crisis Communication Model (SMCC) (Jin, Liu & Austin, 2014).

organizations must communicate with social media influencers, follower and social media inactives (Jin and Liu, 2010).

Limitations of this model are: its focus on a single organization; lack of insight into how various organizations relate on social media; and how influencers can be identified and used effectively.
(SMCC) (Jin, Liu & Austin, 2014).
The broad purpose of this research is to understand how people communicate on social media, before and after an emergency at a festival by examining the different purpose, nature and patterns of posts that emerge.
RESEARCH QUESTION

How does social media communication change before and after an onsite emergency at a festival event?

Does the nature and purpose of social media communication change once an emergency occurs that affects festival operations?

Does the sentiment of social media communication change once an emergency occurs that affects festival operations?

How does the nature of the emergency influence social media communication once an emergency occurs that affects the festival operations?
<table>
<thead>
<tr>
<th>Festival Name</th>
<th>Festival type</th>
<th>Website</th>
<th>Dates of festival / emergency</th>
<th>Types of emergency / disaster</th>
<th>Brief description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Galbani Buffalo Italian Festival</td>
<td>Heritage Festival</td>
<td><a href="http://www.buffalotelia.com">www.buffalotelia.com</a></td>
<td>July 12-15, 2015</td>
<td>Human Induced (Fight)</td>
<td>The third day shut down early</td>
</tr>
<tr>
<td>Hope &amp; Glory</td>
<td>Music Festival</td>
<td>No Website</td>
<td>August 05-06, 2017</td>
<td>Human Induced (overcrowd)</td>
<td>Got Cancelled before starting</td>
</tr>
<tr>
<td>Future Music Festival Asia</td>
<td>Music Festival</td>
<td><a href="http://www.livesci">http://www.livesci</a></td>
<td>March 15, 2014</td>
<td>Human induced (overheating and drug use)</td>
<td>6 people died due to overheating</td>
</tr>
<tr>
<td>Time Warp</td>
<td>Music Festival</td>
<td><a href="http://www.time-warp.d">www.time-warp.d</a></td>
<td>April 16-17, 2016</td>
<td>Human Induced (Overheating and Drug Use)</td>
<td>The second day of the festival</td>
</tr>
<tr>
<td>BPM Festival</td>
<td>Music Festival</td>
<td><a href="http://thebpmfest">http://thebpmfest</a></td>
<td>January 6 - 15, 2017</td>
<td>Human Induced (Shooting)</td>
<td>A shooting, 5 people killed out</td>
</tr>
<tr>
<td>Route 91 Harvest Festival</td>
<td>Music Festival</td>
<td><a href="http://www.route91harvest">www.route91harvest</a></td>
<td>October 1, 2017</td>
<td>Human Induced (Shooting)</td>
<td>59 people killed, 500 injured</td>
</tr>
<tr>
<td>Zombicon</td>
<td>Horror Festival</td>
<td><a href="http://www.zombicon.com">www.zombicon.com</a></td>
<td>October 17, 2015</td>
<td>Human Induced (Shooting)</td>
<td>One person killed, 5 injured by organizers</td>
</tr>
<tr>
<td>Shambhala</td>
<td>Music Festival</td>
<td><a href="http://www.shambhala.com">www.shambhala.com</a></td>
<td>August 10-13, 2017</td>
<td>Natural (Fire)</td>
<td>organizers shut down the festival</td>
</tr>
<tr>
<td>Tomorrow World</td>
<td>Music Festival</td>
<td><a href="http://www.tomorrowworld.com">www.tomorrowworld.com</a></td>
<td>September 25-27, 2015</td>
<td>Natural (Heavy Rain)</td>
<td>The festival cancelled for non-weather related reasons</td>
</tr>
<tr>
<td>Y NOT Festival</td>
<td>Music Festival</td>
<td><a href="http://www.ynotfestival.com">www.ynotfestival.com</a></td>
<td>July 26-29, 2017</td>
<td>Natural (Heavy Rain)</td>
<td>the final day called off due to a severe thunderstorm</td>
</tr>
<tr>
<td>Edmonton Folk Music Festival</td>
<td>Music Festival</td>
<td><a href="http://www.edmontonfolk.com">www.edmontonfolk.com</a></td>
<td>August 9-12, 2017</td>
<td>Natural (Storm)</td>
<td>the first day of the 4-day festival</td>
</tr>
<tr>
<td>Tomorrowland</td>
<td>Music Festival</td>
<td><a href="http://www.tomorrowland.com">www.tomorrowland.com</a></td>
<td>July 27-29, 2017</td>
<td>Technical (stage fire)</td>
<td>last day of the festival got canceled</td>
</tr>
<tr>
<td>Detonate</td>
<td>Music Festival</td>
<td><a href="http://www.detonate1.com">www.detonate1.com</a></td>
<td>June 9, 2016</td>
<td>Technical (tent safety problem)</td>
<td>It shut down because one of the tents was unsafe</td>
</tr>
</tbody>
</table>
Cases
2 recent (past three years) large-scale festival emergencies that were present on social media. human-induced, and a natural disaster.

Zombicon (Human Induced) 2015
  Fundraising event in Fort Myers Florida
  On site shooting
  1 person died, 6 others injured

Shambhala (Natural) 2017
  Music Festival in rural British Columbia
  Wild fires in the area
  Show cancellations announced due to evacuation threat
METHOD

Conventional content analysis of tweets

Twitter's developer access and a custom API

Zombicon = #zombicon, @zombicon

Shambhala - #Shambhala, #Shambhala_mf, @Shambhala_mf

24 hours before, 24 hours after
Sequential Explorative (Neuman & Robson, 2012)

Who, audience, emergency related, response required and tone (positive, negative, neutral)

Nature: conversational, informational, promotional, status, phatic and unclassifiable (MacKay et al, 2017; Java et al. 2007)

Purpose: information sharing, information seeking, engaging with others, expressing emotions/opinions and other (Hays et al, 2013; MacKay et al, 2017)

Sentiment: joyful, grateful, amused, content, proud, awed, loving, hopeful, interested, angry, sad, afraid, ashamed, contemptuous, embarrassed, guilty, disgusted, surprised and compassionate (Hawjin et al, 2012; Cohn et al, 2009; Fredrickson et al, 2003)

nature is how the user attempts to achieve their purpose

purpose refers to the user's intention for posting
## RESULTS

<table>
<thead>
<tr>
<th>Festival</th>
<th>Tweets before</th>
<th>Tweets after</th>
<th>Total tweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shambhala</td>
<td>214</td>
<td>885</td>
<td>1099</td>
</tr>
<tr>
<td>ZombiCon</td>
<td>335</td>
<td>1421</td>
<td>1756</td>
</tr>
</tbody>
</table>
## RESULTS

<table>
<thead>
<tr>
<th></th>
<th>SHAMBHALA</th>
<th>ZOMBICON</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Who</strong></td>
<td>52% Individuals</td>
<td>55.9% Individuals</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td>91% General</td>
<td>93.5% General</td>
</tr>
<tr>
<td><strong>Emergency related</strong></td>
<td>55%</td>
<td>67.3%</td>
</tr>
<tr>
<td><strong>Response required</strong></td>
<td>2%</td>
<td>3.6%</td>
</tr>
<tr>
<td><strong>Tone</strong></td>
<td>63% positive of neutral</td>
<td>60.3% neutral</td>
</tr>
</tbody>
</table>
Purpose:

**Information sharing**: #Shambhala2017 organizers are now ending early. Everyone leaves tomorrow https://t.co/BBtuD8V3zy

**Information seeking** @shambhala_mf Any updates @shambhala_mf ?

**Engaging with others**: @_c_ @D @r @m @c @L @shambhala_mf I wish I was there with you.

**Expressing emotions/opinions** @shambhala_mf This just mean the lasers will look cooler at night

**Other** RT @DestructoHARD: 5am ðŸ”¥ @shambhala_mf # ðŸ™ðŸ½ https://t.co/iLZ1y3qYLg
Nature

classificational  @xyz @abc @shambhala_mf we need a campout sunrise set tho ... @J
informational  RT @cbcnewsbc: A evacuation alert in the Kootenays has been expanded to include #Shambhala2017, officials say. #BCfires https://t.co/UgsRwyâ€’

promotion  LOOKING TO BOOST YOUR #FOLLOWERS ?ðŸŒ• https://t.co/C4jk6MELny ðŸŒ•

phatic  RIP zombicon victims

unclassifiable  #Shambhala2017.ðŸœ™ðŸœ’ https://t.co/CD6Q3au9owðŸœ’https://t.co/iLZ1y3qYLg
<table>
<thead>
<tr>
<th>NATURE</th>
<th>SHAMBHALA</th>
<th>ZOMBICON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversational</td>
<td>9.8</td>
<td>5.4</td>
</tr>
<tr>
<td>Informational</td>
<td>53.8</td>
<td>72.1</td>
</tr>
<tr>
<td>Phatic</td>
<td>14.8</td>
<td>11.6</td>
</tr>
<tr>
<td>Promotional</td>
<td>18.2</td>
<td>5.3</td>
</tr>
<tr>
<td>Status</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Unclassifiable</td>
<td>1.5</td>
<td>4.8</td>
</tr>
</tbody>
</table>
## RESULTS

<table>
<thead>
<tr>
<th>PURPOSE</th>
<th>SHAMBHALA</th>
<th>ZOMBICON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging with others/relationship building</td>
<td>7.3</td>
<td>7.8</td>
</tr>
<tr>
<td>Expressing emotions/opinions</td>
<td>13.7</td>
<td>20.3</td>
</tr>
<tr>
<td>Info seeking</td>
<td>1.4</td>
<td>3</td>
</tr>
<tr>
<td>Info sharing</td>
<td>77.1</td>
<td>58.8</td>
</tr>
<tr>
<td>Other</td>
<td>.6</td>
<td>10</td>
</tr>
</tbody>
</table>
### RESULTS

**ZOMBICON**

\[ \chi^2 = 303.027, \quad 4 \quad p = .000 \]

<table>
<thead>
<tr>
<th></th>
<th>Engaging with other / Relationship building</th>
<th>Expressing Emotions / Opinions</th>
<th>Info Seeking</th>
<th>Info Sharing</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VAR00001</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Before</strong></td>
<td>100</td>
<td>80</td>
<td>12</td>
<td>113</td>
<td>30</td>
<td>335</td>
</tr>
<tr>
<td><strong>Adjusted Residual</strong></td>
<td>16.6</td>
<td>1.8</td>
<td>-.7</td>
<td>-10.4</td>
<td>-.7</td>
<td></td>
</tr>
<tr>
<td><strong>During</strong></td>
<td>38</td>
<td>276</td>
<td>40</td>
<td>922</td>
<td>145</td>
<td>1421</td>
</tr>
<tr>
<td><strong>Adjusted Residual</strong></td>
<td>-16.6</td>
<td>-1.8</td>
<td>-.7</td>
<td>10.4</td>
<td>.7</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>138</td>
<td>356</td>
<td>52</td>
<td>1035</td>
<td>175</td>
<td>1756</td>
</tr>
</tbody>
</table>
**RESULTS**

**ZOMBICON**

\[ \chi^2 = 305.569, \ p = .000 \]

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### Timing * Nature Crosstabulation

<table>
<thead>
<tr>
<th>Timing</th>
<th>Count</th>
<th>Conversational (questions, referrals, responses)</th>
<th>Informational (factual or historical info)</th>
<th>Phatic (expression, monologue or greeting)</th>
<th>Promotional / Advocacy</th>
<th>Status (response to what are you doing now)</th>
<th>Unclassifiable</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before</td>
<td>54</td>
<td>144</td>
<td>65</td>
<td>61</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>335</td>
</tr>
<tr>
<td>Adjusted Residual</td>
<td>9.7</td>
<td>-13.4</td>
<td>5.0</td>
<td>11.7</td>
<td>2.5</td>
<td>-2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>During</td>
<td>Count</td>
<td>40</td>
<td>1127</td>
<td>138</td>
<td>32</td>
<td>5</td>
<td>79</td>
<td>1421</td>
</tr>
<tr>
<td>Adjusted Residual</td>
<td>-9.7</td>
<td>13.4</td>
<td>-5.0</td>
<td>-11.7</td>
<td>-2.5</td>
<td>2.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>94</td>
<td>1271</td>
<td>203</td>
<td>93</td>
<td>10</td>
<td>85</td>
<td>1756</td>
</tr>
</tbody>
</table>
## RESULTS

### SHAMBAHLA

\[ X^2 = 78.938, 4 \ p = .000 \]

<table>
<thead>
<tr>
<th></th>
<th>Engaging with other / Relationship building</th>
<th>Expressing Emotions/Opinions</th>
<th>Info Seeking</th>
<th>Info Sharing</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timing * Purpose 1 Crosstabulation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expected Count</strong></td>
<td>15.6</td>
<td>29.2</td>
<td>2.9</td>
<td>165.9</td>
<td>.4</td>
<td>214.0</td>
</tr>
<tr>
<td><strong>Adjusted Residual</strong></td>
<td>3.9</td>
<td>6.4</td>
<td>3.3</td>
<td>-8.7</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td><strong>During</strong></td>
<td>51</td>
<td>92</td>
<td>7</td>
<td>734</td>
<td>1</td>
<td>885.0</td>
</tr>
<tr>
<td><strong>Expected Count</strong></td>
<td>64.4</td>
<td>120.8</td>
<td>12.1</td>
<td>686.1</td>
<td>1.6</td>
<td>885.0</td>
</tr>
<tr>
<td><strong>Adjusted Residual</strong></td>
<td>-3.9</td>
<td>-6.4</td>
<td>-3.3</td>
<td>8.7</td>
<td>-1.1</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>80</td>
<td>150</td>
<td>15</td>
<td>852</td>
<td>2</td>
<td>1099</td>
</tr>
<tr>
<td><strong>Expected Count</strong></td>
<td>80.0</td>
<td>150.0</td>
<td>15.0</td>
<td>852.0</td>
<td>2.0</td>
<td>1099.0</td>
</tr>
</tbody>
</table>
### RESULTS

**SHAMBHALA**

\[ \chi^2 = 123.474, \quad 5 \quad p = .000 \]

<table>
<thead>
<tr>
<th>Timing * Nature 1 Crosstabulation</th>
<th>Nature 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Conversational (questions, referrals, responses)</td>
<td>Informational (factual or historical info)</td>
<td>Phatic (expression, monologue or greeting)</td>
<td>Promotional / Advocacy</td>
<td>Status (response to what are you doing now)</td>
<td>Unclassifiable</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timing</td>
<td>Before Count</td>
<td>39</td>
<td>67</td>
<td>73</td>
<td>24</td>
<td>4</td>
<td>7</td>
<td>214</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Residual</td>
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<td>4.6</td>
<td>-7.5</td>
<td>8.8</td>
<td>-3.0</td>
<td>1.2</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>During</td>
<td>Count</td>
<td>69</td>
<td>530</td>
<td>91</td>
<td>176</td>
<td>8</td>
<td>11</td>
<td>885</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted Residual</td>
<td></td>
<td>-4.6</td>
<td>7.5</td>
<td>-8.8</td>
<td>3.0</td>
<td>-1.2</td>
<td>-2.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>108</td>
<td>597</td>
<td>164</td>
<td>200</td>
<td>12</td>
<td>18</td>
<td>1099</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION

Consistent with past research (MacKay et al, 2017)

  Purpose: information sharing

  Nature: informational

Once an emergency takes place the discussions shifts to information

Additional ‘noise’ may be present

Different patterns between emergencies are clear
IMPLICATIONS

SOCIAL MEDIA

**Chatter** visually and functionally imitates the Twitter platform, allowing participants to monitor and interact with the simulated public and media in real time.

**Chatbook** is designed to mimic Facebook both in appearance and usage. Players can also create custom Pages for their organizations to broadcast their messages.

**Chatdeck**’s purpose is to provide players with a tool to manage and monitor all the information being provided through the social media sites Chatter and Chatbook.
IMPLICATIONS
IMPLICATIONS
IMPLICATIONS

TomorrowWorld guests stranded overnight with no shelter, rides

With no transportation options, two exhausted TomorrowWorld attendees slept outside with no shelter in the early hours of Sept. 27, 2015.
IMPLICATIONS

(Festival Failure)

- Financial resources
- External forces
- Marketing and planning
- Organization culture
- Human resource

(Getz, 2002)
CONCLUDING THOUGHTS

Future Research:
Diverse events
Full lifecycle of a crisis
Additional SM platforms
In depth exploration of the data
Network analysis
social-media can be ‘noisy’ (Madianou, 2015). There is some evidence that many people prefer interpersonal communication (texting, calling) rather than social media (posting, sharing on social media) (Madianou, 2015). Unique aspects of events and emergencies
THANK YOU
CHRISTINE.VANWINLE@UMANITOBA.CA


• https://www.theguardian.com/us-news/2017/oct/02/absolute-mayhem-britons-las-vegas-describe-terror-panic


REFERENCES


