

# Florida State University Libraries

---

2019

## From "thank God For Helping This Person" To "libtards Really Jumped The Shark": Opinion Leaders And (in)civility In The Wake Of School Shootings

Deana A. Rohlinger, Cynthia Williams and Mackenzie Teek

The publisher's version of record is available at <https://doi.org/10.1177/1461444819875708>



**From “Thank God for Helping this Person” to “Libtards Really Jumped the Shark”:  
Opinion Leaders and (In)civility in the Wake of School Shootings**

Deana A. Rohlinger  
Professor of Sociology  
Florida State University

Cynthia Williams  
Graduate  
Florida State University

Mackenzie Teek  
Graduate  
Florida State University

We thank Sarah Sobieraj, Miranda Waggoner, Rob Boatright, Tim Shaffer, and Danna Young for their comments on earlier drafts of this paper, and Warren Allen and Eden Olson for their research assistance. We also thank the editor and anonymous reviewers for their helpful comments. Funding for this project was provided by the National Institute for Civil Discourse.

**Abstract:** Drawing on a qualitative analysis of 5,996 tweets and 480 mainstream news stories about the Florida State University (FSU) and the Ohio State University (OSU) shootings, we examine who emerges as opinion leaders during crises, the kinds of narratives they help construct about school shootings, and the relative civility of these narratives. We find that the opinion leaders who emerge after a crisis are assumed to have local knowledge about the incident and/or are able to quickly curate information about the incident. Additionally, we find that the quality of information spread by opinion leaders is critical to narrative construction and civility. The largely fact-based narratives associated with the FSU incident were far more civil than the OSU narratives, which were based on disinformation and polemics. We conclude the paper by calling on scholars to take a more nuanced approach to conceptualizing and study opinion leaders.

Social scientists are concerned about the negative effects of social media on civility and democracy. Scholars find that social media can be used to spread misinformation, or inaccurate information, and disinformation, or intentionally deceptive information, which can feed affective and social polarization (Gervais, 2015; Suhay et al., 2018; Iyengar et al., 2012) The role of mis-and-disinformation in polarization is consequential because it can hinder deliberation, undermine policy processes, and influence election outcomes (Weeks and Garrett, 2014; Hwang et al., 2014). In short, the spread of mis-and-disinformation on social media have consequences for civility and deliberative processes because incorrect information on these forums can undermine the fair, open and process-based discussions that facilitate the exchange of diverse ideas and are a marker of a healthy democracy (Muddiman, 2019).

Given its negative consequences, scholars increasingly focus their attention on incivility in digital spaces. Social scientists assess the relative civility of a given forum and its content (Santana, 2015; Sobieraj and Berry, 2011; Coe et al., 2014), unpack the various ways citizens understand incivility (Kenski et al., 2017), and examine incivility's effects on politicians, the citizenry, and political processes (Theocharis et al., 2016). We contribute to this literature by assessing the relative importance of opinion leaders (aka "influencers," "broadcasters," and "hashtag entrepreneurs"), who are centrally located or have a lot of social capital in online networks, to civility in narrative construction on Twitter after school shootings. Opinion leaders are important to narrative construction because they reach a critical mass of users, effectively spread information across social media platforms, and shape how other forum users discuss issues and events (LeFebvre and Armstrong, 2018; Valente and Davis, 1999).

Despite their importance, it is unclear if opinion leaders have the same influence during crises, or times when individuals' communication patterns are altered and individuals are more

likely to interact with users outside of their typical networks (Hyvärinen et al., 2015). During these moments, the status and follow hierarchy may break down and other individuals may emerge as opinion leaders on social media. We argue that analyzing who emerges as opinion leaders after crises is important for two reasons. First, it recognizes the dynamism of public discourse and the opinion leaders animating conversations. Scholars often take a social network approach when explaining the relevance of opinion leaders to information diffusion (Bakshy et al., 2012; Zhang et al., 2016; Valente and Davis, 1999). Consequently, there is a fair amount of focus on how the structures of platforms connect users and make it easy for individuals with a lot of followers to share information and shape public conversations. While excellent, this research cannot illuminate who fills information gaps when the normal flow of information is disrupted, or why these individuals emerge as opinion leaders.

Second, it puts the empirical focus on the relative accuracy of the information being disseminated by opinion leaders, and the effects of mis-and-disinformation on narrative construction and civility. Accuracy, particularly after a crisis, matters because the quality of information spread by opinion leaders could affect the opportunity among forum users to engage in an informed conversation about a social ill. Deliberative processes based on facts tends to be civil, while those based on misinformation tends to be uncivil (Blom et al., 2014; Sunstein, 2017; Mutz, 2006). Systematically assessing the quality of information circulated by opinion leaders sheds light on the role of mis-and-disinformation in narrative construction and (in)civility.

Drawing on a qualitative analysis of 5,996 tweets and 480 mainstream news stories about the Florida State University (FSU) and the Ohio State University (OSU) shootings, we examine who emerges as opinion leaders during crises, the kinds of narratives they help construct about school shootings, and the relative civility of these narratives. In these cases, we find that the

opinion leaders who emerge after a crisis are assumed to have local knowledge about the incident and/or are able to quickly curate information about the incident. We also find that the quality of information spread by opinion leaders is critical to narrative construction and civility. The largely fact-based narratives associated with the FSU incident were far more civil than the OSU narratives, which were based on disinformation and polemics.

### **OPINION LEADERS, (IN)CIVILITY AND NARRATIVES**

Crises disrupt normal communication patterns (Hyvärinen et al., 2015) and can alter who has standing, or legitimacy and voice (Gamson and Wolfsfeld, 1993), as well as who emerges as an opinion leader on social media. Movement scholars conceptualize standing as an outcome of relational dynamics that affect the ability of activists to get media attention during a particular moment. The relationship between movements and media is asymmetrical. Activists often seek media attention for their claims, and journalists rarely need their comments. Consequently, activists must look for, or create, opportunities to get their ideas in coverage (Gamson and Wolfsfeld, 1993). Standing draws attention to the dynamism of discourse and the ability of individuals/groups to create/take advantage of discursive opportunities for their own purposes (Gamson and Meyer, 1996). These “critical moments” are not unlike crises insofar as individuals/groups that typically do not have much power in a system can emerge and provide new frameworks for understanding social problems (Staggenborg, 1993). In the case of crises this means that the status and follow hierarchy potentially breaks down and individuals without a lot of followers find themselves in position to influence narratives.

There are at least three types of actors that might gain standing and become opinion leaders in the wake of a crisis: local journalists, individuals with local knowledge, and trolls. As professionals charged with circulating correct information and, increasingly, responsible for

helping the public construct narratives about events on social media in real time (Mourão, 2015; Hermida, 2010), local journalists are well positioned to affect crisis narratives. Users generally assume information provided by journalists is correct (Bessi et al., 2015; Del Vicario et al., 2016) and this information can serve as the foundation for a narrative about an incident.

Journalists are not the only ones who may have accurate information about a crisis. Individuals who experience a situation first hand or who are able to curate information about on-the-ground realities may also emerge as opinion leaders. Local knowledge is critical after crises, and individuals in affected areas play key roles in disseminating information and coordinating relief efforts (Takahashi et al., 2015). It is easy to imagine locals playing an important role in the wake of school shootings and spreading information that becomes the basis for narrative construction about an event. However, it is not always easy to determine who is disseminating factual information online. Individuals can pose as locals and intentionally circulate disinformation about an incident. Trolls, for instance, exploit moments of uncertainty, infusing them with disinformation (Phillips, 2015). It is possible that individuals participating in a discussion about a crisis will not be able to tell the difference between locals disseminating accurate information and trolls circulating disinformation.

Opinion leaders, and the information they provide, affect whether narratives are civil. There is a “bandwagon effect” online, meaning that individuals take cues from and are more likely to share posts that are “liked” (Waddell, 2018). Additionally, users take cues from other regarding forum decorum. If opinion leaders use aggressive language or engage in ad hominem attacks, other users conform to the standard – regardless of whether or not their posts are anonymous (Rösner and Krämer, 2016). In short, the “argumentative climate” (Price et al., 2006) around an issue can affect the civility of the debate.

The truthfulness of the information circulated after a crisis likely plays a role in narrative civility. Factual information may cause narratives to be more civil because facts create an “awareness system” that can facilitate constructive engagement and deliberation (Hermida, 2010; Herbst, 2010).<sup>1</sup> Correct information provides a foundation for disagreement, which helps individuals craft higher quality arguments and better understand why others might disagree with their points of view (Price et al., 2002; Mutz, 2006). In the case of school shootings, correct information could lead to conversation regarding what conditions created a crisis and what interventions might solve the problem. Mis-and-disinformation, in contrast, may simply fuel polemics and incivility on a forum (Blom et al. 2014). While narratives rooted in incorrect information may have utility insofar as they spark conversation about an important issue, they may undermine civility and constructive engagement (Borah, 2014).

## **CASES AND METHODS**

To explore how opinion leaders emerge and influence crisis narratives and civility, we analyzed tweets the week following each incident. On November 20, 2014 at 12:25am Myron May, a 31 year-old FSU graduate, went into the university’s library and opened fire with a .380 handgun. May injured three students before he was shot dead by police. In the days following the shooting, it became clear that May was mentally ill. He believed that his behavior was being managed by the U.S. government via mind control. The second “shooting” occurred at the Ohio State University (OSU). On November 28, 2016 at 9:52am, Abdul Razak Ali Artan, an 18 year-old Somali refugee, drove his Civic into a crowd of people, deliberately striking pedestrians. Artan crashed the Civic and attacked students with a butcher knife, injuring 11. OSU police

---

<sup>1</sup> Factual information doesn’t necessary lead to civility (Coe, Kenski, & Rains, 2014). This relationship may be clearer after a crisis since many users are seeking information about an event.

fatally shot Artan. The motive for Artan's attack was not clear and was framed as a potential act of terrorism.

These cases offer two benefits for analyzing the emergence and effects of opinion leaders on narrative construction and civility. First, since the incidents were not "political acts" (Larkin, 2009) generating widespread national outrage, they provide a good opportunity to observe who emerges as opinion leaders, the basis of their standing, and whether they influence narrative construction and civility. Second, these incidents are different which allows us to assess whether there are similarities in opinion leader emergence and effect, and to identify clear points of divergence that require future research. In short, we use a "small n," comparative approach so that we can conduct a "deep analysis" of the cases as well as assess a broader range of variables and their potential relevance across cases (Ragin, 1989). Here, the differences in timing and circumstances of the cases allows us to identify factors relevant to opinion leader emergence and narrative construction.

We used a Python-based program to access the Twitter streaming application interface (API) and to capture/save tweets to a database the day of and six days following each shooting using the hashtags #FSUShooting, #OSUShooting, and #OSUStabbing.<sup>2</sup> This generated a sample of 7,708 tweets about the FSU incident and 10,556 tweets about the OSU incident. The samples were manually cleaned and tweets not directly related to the incidents (e.g., tweets by individuals/companies that used the hashtags to sell their products/services) were deleted. This process left us with 5,996 tweets, including retweets: 3,959 associated with #FSUShooting and 2,037 associated with the #OSUShooting. We kept retweets because we are interested in *what*

---

<sup>2</sup> Our search included additional hashtags. We found that the #FSUShooting and #OSUShooting hashtags identified the most case-relevant tweets. The #OSUStabbing hashtag only had 35 tweets associated with it. These were dropped from the analysis.



kind of tweets were shared and *whose* ideas were shared since both play an important role in narrative construction (Sadler 2017). Retweets allowed us to identify opinion leaders and their relative influence on narrative construction and civility.

We used grounded theory methods to code tweets (Charmaz, 2014). We began by generating a list of 44 discourse types (e.g., tweets criticizing the university and/or its handling of an incident, tweets sharing incorrect information from a news source, tweets commenting that the OSU shooting was actually a stabbing). These discourse types were grouped into five narrative categories – information, disinformation, misinformation, personal narratives and polemics – so that we could identify patterned relations within the data. Informative tweets share correct information about an incident, misinformative tweets share incorrect information about an incident, disinformative tweets intentionally shared misleading information about an incident, personal narratives communicate a user’s stories and feelings about an incident, and polemic tweets share a user’s thoughts about an incident in political terms and/or using cultural stereotypes.

Since intent is difficult to ascertain, we only coded tweets as disinformation if they were associated with troll accounts, or accounts that used popular memes to distort general perceptions about an event (Mutlu et al., 2016). We began by identifying memes about school shootings using [www.knowyourmeme.com](http://www.knowyourmeme.com) and [www.me.me.com](http://www.me.me.com), and then searched the (re)tweets in our sample for keywords associated with popular memes such as “Sam Hyde is the shooter,” which emerged after the UC Santa Barbara shooting. Sam Hyde, a “comedian,” initially took credit/was credited for the shooting on social media. This happened often enough that “Sam Hyde is the shooter” became an established meme that is circulated on social media after shootings through anonymous accounts (Eordogh, 2016; Bromwich, 2017). If an account contained meme

keywords (e.g., “Sam Hyde”), we viewed the account holder’s profile. We found that 25 of the accounts (7 associated with the FSU incident and 18 associated with the OSU incident) tweeting and retweeting memes had been deleted.<sup>3</sup> Since trolls often delete their accounts once they have disrupted or hijacked a conversation – or the accounts are suspended by platform administrators - (Phillips, 2015), we flagged these deleted and suspended accounts as trolls, and, if they used a meme that spread misleading information about an incident, coded their tweets as disinformation.<sup>4</sup>

We did not assume that all accounts retweeting memes were troll accounts. While trolls often retweet one another, users unfamiliar with memes may take the information at face value and share it with others. Consequently, if an account was still active and the user retweeted a meme from a troll account, we assumed that the user was unfamiliar with the meme and coded the retweet as misinformation. This categorization is more conservative than that used by other scholars, who label trolls as individuals circulating “malicious” information or “disruptive activity” designed to lure people into pointless debate (Mutlu et al., 2016; Abril, 2016). We used a more conservative approach in an effort to better assess who served as opinion leaders and the quality of information they shared. It is completely possible that a user with a lot of followers could be an opinion leader and spread bad information found online.

---

<sup>3</sup> Trolls accounted for a very small percentage of users (0.91% of the 769 users in the FSU case and 1.1% of the 1,662 users in the OSU case).

<sup>4</sup> In our sample, trolls almost always spread disinformation and their tweets were typically uncivil. For instance, the troll account “Notcurveme” sent three tweets relative to the OSU incident in our sample. The first tweet identified Sam Hyde as the shooter. The other two tweets falsely claimed that the user had watched his brother get shot by Artan. Recall that the #OSUShooting hashtag was a misnomer since the incident involved a knife rather than a gun. Since these tweets spread incorrect/deceptive information, they were also coded as uncivil. The exception was the user “PRPOnline,” who posted after the OSU incident and whose account was suspended. PRPOnline did not spread memes. Instead, PRPOnline posted pro-gun sentiments, which were polemical but not disinformative. As we discuss later in the paper, many of PRPOnline’s tweets included insults (e.g., the use of the word “libtard”) and stoked political divisions around gun control.

The sample was coded again in order to ascertain whether a tweet was civil or uncivil. We defined uncivil tweets as posts containing direct insults, ideologically extreme language or posts that stoked political divisions or spread incorrect/deceptive information, and/or mocked individuals or groups of people (Berry and Sobieraj 2014). Disinformative tweets were always coded as uncivil since they spread incorrect/deceptive information. Tweets that did not meet the criteria for incivility were coded as civil. Civil tweets were not always polite (Papacharissi 2004). Tweets discussing users' political opinions about hot-button issues such as gun control and tweets including curse words could still be coded as civil as long as they did not contain insults or mock groups of people (e.g., use of the terms "libtards" and "conservatards") or use ideologically extreme language (e.g., "We should kill all illegal immigrants #MAGA"). A user could refer to their opponent's position on gun control as "fucked" as long as they didn't also engage in ad hominem attacks. We use this definition of civility because disagreements are beneficial to deliberation (Habermas 1996), and because deliberation in the digital age is sometimes more explicit and offensive (Papacharissi, 2004). Reliability scores showed that there was substantial agreement among the coders in terms of how to categorize tweets relative to these categories ( $\kappa = .91$ ).<sup>5</sup>

Opinion leaders were initially identified by the number of tweets sent and the number of retweets in the sample (LeFebvre and Armstrong, 2018). In each case there were fewer than four accounts that sent more than five tweets and received over 100 retweets. We traced when opinion leaders sent their tweets and whether they varied in content, how often they tweeted, who retweeted them, and how they presented themselves on their Twitter profiles. Retweets and presentation are particularly important because trolls will create fake accounts, retweet one

---

<sup>5</sup> There were two coders for this data.

another in an effort to hijack discourse, and delete their accounts once their goal has been achieved (Phillips, 2015).

We also distinguish journalists tweeting after an incident from mainstream news coverage of an incident because they may affect narrative construction differently. Although journalists can play an important role in helping a public understand a crisis in real time, scholars find that mainstream coverage increases the likelihood of an issue/incident being discussed on social media (King et al., 2017). To assess the influence of mainstream news on narrative construction we used Newsbank to identify national and local newspaper coverage as well as television and radio news broadcasts the week following the incidents (178 stories about the FSU incident and 302 stories about the OSU incident). We coded each for the date of the story, information provided about the perpetrator, motives attributed to the perpetrator, debates discussed (e.g., mental health, gun control, racial/ethnic profiling), and the types of actors mentioned in the stories (e.g., friend of the assailant, law enforcement, Donald Trump, etc.). We also categorized stories into one of the following types: A *basic story* that briefly describes the incident (e.g., news brief); a *fact-driven story*, which predominantly focuses on the timeline of and facts surrounding the incident; a *speculative story*, which predominantly offers commentary about why the incident occurred; a *humanizing story*, which focuses on the perpetrator; and a *human interest story*, which predominantly focuses on the perspective/experiences of students, university officials, politicians, or athletes. To determine the story type each paragraph was coded as either fact-driven, speculative, humanizing, or human interest. The story classification represents the proportion of paragraphs with a story component (e.g., fact driven) that exceeds

50%. Reliability scores showed that the coders were able to accurately identify the story components based on the operationalizations provided ( $\alpha=.85$ ).<sup>6</sup>

## FINDINGS

Table 1 shows the percentage of tweets by narrative category and discourse type for each of the cases. Tweets about the FSU shooting predominantly focus on personal narratives (54.6%) and correct information (31.8%), while tweets about the OSU shooting largely circulate polemic points of view (35.9%) and disinformation (25.2%). There also are fairly dramatic differences among the cases in terms of civility (Table 1). In the FSU case, the vast majority of discourse is civil (98.1% of tweets) and incivility is rare (1.9% of tweets). This is less true of the OSU case where 64.3% of the tweets are civil and 35.7% of tweets are uncivil. The type of opinion leaders driving narratives about each case vary dramatically (Table 2). In the FSU case, local and national journalists drive narrative construction. This is not true of the OSU case, where trolls tweet and are retweeted the most, despite the fact that trolls accounted for only 1.1% of the 1,662 total users tweeting about the incident. These results provide initial evidence for the argument that opinion leaders and the relative truthfulness of the information they circulate influences narrative construction and civility. The remainder of the paper unpacks the role of opinion leaders and mis-and-disinformation in narrative construction and civility after each incident.

[TABLES 1 AND 2 HERE]

### ***FSU: “Unbelievable. Thank God for helping this person”***

Journalists seem to have played a critical role in narrative construction after the FSU shooting because they shared correct information regarding the incident, which effectively quelled the spread of mis-and-disinformation. Four of the top seven most (re)tweeted accounts

---

<sup>6</sup> There were three coders for this data.

belong to journalists and a news outlet. Andrew Perez (@PerezLocal10 in Table 2), a local journalist who had recently moved from North Florida to Miami, may have been particularly influential in narrative construction because he was the first journalist to share information about the shooting. His initial reporting included pictures and videos from inside the library. This “ambient” reporting (Hermida, 2010) was critical, particularly the first hour after the incident, because a conspiracy theorist immediately posted that the shooting was a hoax. An hour-by-hour analysis of the tweets reveals that 22.6% of the 239 tweets sent the first hour after the shooting contained mis-and-disinformation about the incident, mostly that the shooting was an attempt to strip citizens of their guns which would make it easier for the “New World Order” to seize global control and exercise authoritarian rule. By mid-point into the second hour Perez’s tweets (and those by Garin Flowers) had displaced the mis-and-disinformation, and (non)student comments as well as pictures, videos, from inside the library began to dominate discourse.

Perez’s standing was not a function of a status and follow hierarchy. Perez had less than 2,000 followers on Twitter, substantially fewer than typically are attributed to opinion leaders (Dubois and Gaffney, 2014; LeFebvre and Armstrong, 2018).<sup>7</sup> In this case, Perez’s local knowledge as well as his occupation gave him standing and the ability to help push narratives away from conspiratorial thinking in the aftermath of the shooting. Perez was not the only opinion leader who influenced narrative construction. Melina Myers (@Melinasphotos in Table 2) shared FSU student Jason Derfuss’s survival story. Derfuss was shot in the back by May, but, because the bullet was stopped by several books he had just checked out from the library and loaded into his backpack, he didn’t realize it until he got home. He shared pictures of the bullet-punctured library books on Facebook, claiming his life had been saved by books on John Wyclif

---

<sup>7</sup> The same was true of Garin Flowers (@GarinFlowers), another local journalist with fewer than 2,000 at the time (Table 2).

and by God. Dozens of users took screen shots of Derfuss’s Facebook post and shared it on Twitter. Myers, a local photographer who had 9,241 followers, posted a screenshot of Derfuss’s post accompanied with the note, “Unbelievable. Thank God for helping this person.” Her post had a lot of traction on Twitter, and was liked 12,437 times and retweeted 10,100 times in the first two days after the shooting. While other users with more followers shared similar posts the day after Myers, none had the same traction. A nearly identical post by a FSU fan with more than 96,000 followers only received 34 likes and 16 retweets. Similarly, a post by a gun violence survivor with more than 90 thousand followers received only 42 likes and 85 retweets. This suggests that post timing, in addition to credibility, matters and that a compelling post can give individuals standing on a forum. Myers posted Derfuss’s story within hours of the shooting, the post was deemed credible by other users, and retweeted thousands of times. The popularity of her post helps explain the predominance of personal narratives after the shooting (Table 2).

In this case, the status and follow hierarchy of Twitter matters less in the wake of a crisis as users look for individuals with compelling, credible information. Likewise, those users who do become opinion leaders after an incident affect narrative construction. Perez and Myers shifted narratives away from conspiratorial thinking to information and personal narrative. Table 3, which summarizes the top narratives - personal narrative (PN), Information (I), Polemics (P), Disinformation (D), or Misinformation (M) – in the FSU and OSU tweets on each of the seven days as well as the most mentioned discourse types associated with these categories, shows that these narratives are remarkably stable across the week. Disinformation does not appear until Day Four (Shooting was a hoax, 11.5%); at which point the number of tweets about the incident had fallen off dramatically.

[TABLE 3 HERE]

Mainstream news influenced narrative construction in two important ways (Table 4). First, outlets reinforced the focus on the personal narratives of students and on Derfuss's story in particular. Notice that human interest stories were relatively prominent throughout the week. Additionally, Table 5, which indicates how often different kinds of sources were mentioned in the sample, shows that victims were included in half of the stories in the sample. Most of the coverage that included victims (62.3%) occurred the first two days after the incident. Derfuss accounts for most of these mentions. Dozens of stories featured Derfuss's discovery that he had been shot. *Tampa Bay Times* described how Derfuss's roommate, "sifted through his backpack and found a gold slug. It had gone through the first book before getting lodged in another." The *Daily News* retold the story, adding an interview with the author of the "tome" on Wyclif credited with saving Derfuss's life. Derfuss's story was told by mainstream outlets and shared again on Twitter, reinforcing personal narratives as a dominant theme throughout the week.

Second, mainstream media infused a new narrative into Twitter discourse; one focusing on mental health care in America (Table 3: Assailant information, media source). Many of the stories either mentioned or focused on May's mental health problems (Table 4: 21.9%), which were attributed for the incident. Journalists largely chronicled May's quick mental decline (which was evident from quoted posts and letters from May included in stories; Table 5: Perpetrator, 32%), his recent mental health evaluation, and the response of his friends and colleagues (who are mentioned in 18.5% of the stories, Table 5) to the shooting. According to coverage, May's friends tried three times to get him help, and were told that May did not qualify for care. One of May's friends told the *Tampa Bay Times*, "You have to commit a crime to get the help you need. Why isn't it the reverse? This could have been avoided. The entire thing." This story in particular was shared by users with notes like, "This is why we need mental health



care reform,” and “FSU Gunman was a victim of his own mental health disorder. Government needs to add funding to mental health-not take it away,” accompanying the link.

[TABLES 4 AND 5 HERE]

***Ohio State University: “Libtards really jumped the shark”***

Trolls seem to have played a critical role in narrative construction in the immediate aftermath of the OSU incident. Four of the top seven most often (re)tweeted accounts belonged to trolls spreading the “Sam Hyde is the Shooter” meme, and all four of these accounts began posting shortly after the incident (Table 2). Notcurveme and roscoesbjones, posing as students, identified Sam Hyde as the OSU shooter and included a picture of Hyde holding an AR-15.<sup>8</sup> Ess4emily and rex\_caerulus<sup>9</sup> upped the ante by offering political motivations for the attack. Ess4emily attributed the shooting to neo Nazis tweeting, “#OSUShooting hearing rumors that neo nazi leader, Same Hyde is behind this atrocity, please stay safe.” Rex\_caerulus instead blamed the antifa posting, “#OSUShooter identified as Hillary supporter and Antifa activist Samuel Hydestein #osushooting.” These were not the only trolls in our sample - we found 18 different accounts posting the Sam Hyde meme – only the most popular.

This means that, like the FSU case, the users who were the most influential in narrative construction after the incident did not have a lot of followers. The difference here is that, at least relative to the Sam Hyde meme, one or more individuals worked to disseminate disinformation and derail public debate – a fairly common practice among trolls. Trolls create multiple accounts and vary their posts slightly until they craft content that spreads across a network (Phillips,

---

<sup>8</sup> It is impossible to ascertain how many individuals were involved in spreading the Sam Hyde meme, or determine the range of roles they assumed in online. As mentioned above, Notcurveme, who posted three tweets in the sample, also claimed that he had watched his brother get shot. However, it is completely possible that Notcurveme assumed other roles in their tweets and that they are simply not captured here.

<sup>9</sup> This is a reference to Caerulus Rex, a host of the neo-nazi podcast “Salting the Earth.”

2015). In this case, posts that identified an assailant and his motivations for the attack, while still giving a wink and nod to the trolling community, were the most popular. Trolls, in short, gained standing by sharing disinformation that seemed to be legitimate information from credible sources.

Sam Hyde trolls were not the only influencers shaping narratives about the OSU incident. PRPOnline (the top influencer in our sample, Table 2) primarily insulted liberals supporting gun control. Since PRPOnline's account was suspended, we cannot determine the number of account followers. We can say that PRPOnline's standing reflected, in part, the "argumentative climate" (Price et al., 2006) of the comments posted on Twitter, which largely opposed gun restrictions and favored getting more guns on campus. In the fifth tweet in our sample AimingForTruth, who posted a link to Fox news's coverage on the incident, opined, "College campuses are 'gun-free zones' except when someone decides they aren't. Shameful that universities outlaw self-defense." PRPOnline's most popular post which read, "Libtards really jumped the shark on this one. #OSUShooting by 'white supremacist' turned out to be middle easterner with a [knife]," reflected the argumentative climate, and upped the ante by using more offensive language to describe gun control advocates; behavior that is increasingly seen as acceptable online (Hmielowski et al., 2014).

PRPOnline's use of the term "libtard" was not only popular, but also provided a foundation for angry, polemic, and sometimes uncivil, discourse (Table 1). In our sample alone, PRPOnline's posts were retweeted by 205 other users, many of whom made additional comments about "dishonest," "stupid," and "deranged" liberals (Table 2). A user who retweeted several of PRPOnline's posts chimed in wondering whether "libtards" would pass legislation prohibiting "immigrant Muslims from driving cars." Another user circulated an aerial photo of Artan's

lifeless body on the sidewalk with the post, “One suspect sent to hell.” This tweet, and others like it, which asked “Do you see what happens when they let Refugees invade our Country[?],” were also relatively popular and used polemics to provoke antagonism online (McCosker, 2014).

It is clear from Table 3 that these efforts successfully shaped the narratives about the OSU incident, and, like the FSU case, the narratives were stable across the week. Disinformation about the assailant and polemics about Muslims, refugees and terrorists dominate discourse. Correct information about the assailant does not show up until Day Three, by which point discussion about the incident on Twitter is virtually nonexistent. Mainstream media introduced a new narrative into the conversation: appreciation to law enforcement (Table 4). This narrative referred to Alan Horujko, the OSU officer who shot and killed Artan within two minutes after the attack began. Horujko, who was investigating a gas leak nearby, chased Artan and shot him five times after Artan refused to drop his weapon. His story was recounted numerous times in mainstream media, and the officer was quickly labelled a hero for his fast response (Tables 4 and 5).

Beyond this, however, mainstream media largely reinforced the polemic debates online. This happened for two reasons. First, there were a lot of unknowns when it came to Artan’s motives. Law enforcement scoured Artan’s communications looking for terrorist connections given that his attack was reminiscent of one four months earlier in Nice, France, where Mohamed Lahouaiej-Bouhelel, a Tunisian who had expressed support for the Islamic State, deliberately drove a cargo truck into a crowd, killing 86 people, and given that ISIS claimed credit for the attack, calling Artan one of its “soldiers.” Journalists reported that Artan had posted angry comments about American treatment of Muslim-majority nations on social media (Portions of Artan’s post were mentioned/quoted in 79.8% of the stories, Table 5). His posts

included statements such as, "America! Stop interfering with other countries, especially the Muslim Ummah [community]. We are not weak. We are not weak, remember that," and "If you want us Muslims to stop carrying lone wolf attacks, then make peace" with ISIS. Journalists noted that law enforcement were looking into whether this indicated Artan supported, and engaged in, terrorism (a police source is included in 60.9 percent of the stories, Table 5). Investigators did not find any terrorist propaganda on Artan's computer or in his home, nor did they uncover any communication with terrorist networks.

Second, American discourse regarding immigration, Muslims and refugees shifted dramatically between the FSU and OSU incidents (Coen, 2019). During Obama's presidency, voters sorted themselves by party on, among other things, their views related to race/ethnicity. This shift helped set the stage for an election that emphasized Americans' racial, ethnic, and social identities and attitudes. Candidate Trump capitalized on these shifts and catapulted himself into the White House (Sides et al., 2017). Newly elected Trump commented on the incident and initially praised law enforcement's quick response. He posted his most inflammatory comment two days after the incident. In it, Trump argued that Artan was "a Somali refugee who should not have been in our country." Trump's tweet received 97,498 likes, was shared 30,532 times and garnered some mainstream attention (Trump was quoted in 12.9% of the stories, Table 5). While we cannot assess the precise effect of Trump's refugee tweet, this sentiment from a high-level politician likely fueled the conversation online (Graf and Aday, 2008; Stroud, 2010) and further contributed to the cascade of negative comments about Muslims and refugees. Fifty-one users in the sample (re)tweeted content supporting the "extreme vetting" of immigrants and refugees after Trump's tweet.

## CONCLUSION

We find that the traditional status and follow hierarchy associated with opinion leaders on Twitter can collapse after a crisis. In both cases, forum users liked and retweeted the posts of individuals who seemed to have local knowledge about the incidents, not individuals who had the most followers. These findings illustrate the value of conceptualizing influencers relative to a changing context rather than as a function of a status and follow hierarchy. Thinking about who gains standing, when they gain standing, and why they gain standing forces scholars to consider how the dynamism of public discourse and the ability of individuals to contribute to (or hijack) public conversations.

We also find that opinion leaders are instrumental in crisis narrative construction. In the FSU case, local journalists and a local photographer steered discourse away from misinformation and conspiracy theories to correct information and personal narratives. In the OSU case, trolls and a gun rights proponent feed Twitter discourse a diet of disinformation and pro-gun polemics, which caused narratives to focus on terrorism, Muslims and refugees, and the need for more guns on campus. Additionally, we find that the narratives opinion leaders help construct in the wake of the crisis endure throughout the week. There is a “bandwagon effect” among users (Waddell, 2018) insofar as the ideas of opinion leaders become a focal point over time. Personal narratives and information, for instance, are prominent in the FSU case the day of and the six days following the shooting. The same is true of disinformation and polemics relative to the OSU incident.

This does not mean new narratives cannot gain traction on Twitter. The argument that the FSU shooting was a hoax shows up in discourse on Day Four and correct information trickles into the OSU debate on Day Three. The point here is that by the time these new narratives take

hold discussion about the incident has dropped precipitously. Mainstream coverage also introduced new narratives and reinforced existing narratives. In the FSU case, mainstream coverage brought Derfuss's story to a broader audience, reinforcing the focus on student narratives, and stimulated discussion about mental health in America. In the OSU case, mainstream coverage of Artan's posts before the attack as well as Trump's comments about Artan's status fed narratives that the incident was a potential terrorist attack and that Muslim refugees should not be welcome in the U.S.

Finally, we find that opinion leaders and the accuracy of the information they spread affects the civility of the discussion. The largely fact-based narratives associated with the FSU incident was far more civil than the OSU narratives, which were based on disinformation and polemics. This has implications for civility and democracy. While disinformation and polemics may stimulate a broader public conversation about social concerns such as gun violence, the relative incivility of these narratives which included insults such as "libtard" are unlikely to increase users' tolerance to individuals' championing opposing perspectives – which is an important precursor to consensus-building (Nisbet and Scheufele, 2004; Walsh, 2007; Sunstein, 2017; Blom et al., 2014). Conversely, fact-based narratives, particularly those discussing May's mental health, could assist in consensus-building regarding health care in America. Even the personal narratives shared by students may help those holding opposing points of view regarding issues such as gun control better understand one another insofar as these stories can help individuals find areas of unanticipated agreement (Polletta and Lee, 2006).

There is still much work to be done on opinion leaders, crisis narratives, and civility. First, more research is need on the relationship between post timing, opinion leader emergence, and civility. In the FSU case, Myers's post about Derfuss was similar to that of other users who

had thousands more followers. The difference was that Myers's post was first and offered a personal story about a student involved in the incident. Second, it is important to assess the effects of traditional, rank and follow opinion leaders on narrative construction and civility, particularly when they weigh in shortly after an incident. It is quite possible that if Trump had tweeted about Artan's refugee status immediately after the incident, the OSU narratives would have been more polemic and uncivil. Third, it would be worthwhile to examine how the social location of the assailants (e.g., race/ethnicity, religion, citizenship), the circumstances of the case (e.g., number of casualties and root cause), and the broader political climate affect influencer emergence and discourse. For instance, it is possible that Trump's cultivation of a political climate hostile to refugees as well as the tendency of some posters to make "vitriolic" comments about Mexican immigrants and immigration (Santana, 2015) both primed users to make more negative/uncivil comments about the OSU incident and made the Artan case ripe for troll exploitation. Fourth, it is important to better analyze how trolls and individuals/groups using bots respond to crises in order to sow political discord, their relative success at doing so over time, and the implications for narrative construction and civility. Social scientists find that trolls and bots played key roles in manipulating public opinion and political debates since at least 2016 (Howard and Kollanyi, 2016; Bradshaw and Howard, 2017). However, it is not clear to whether efforts to hijack discourse are always successful, whether these efforts (and their success) are increasing over time, or if they make discourse more uncivil. Since bots and trolls provide users with bad information, and political theorists point out that facts are important to constructive engagement (Mutz, 2006; Price et al., 2002), scholars could learn a lot about civility and deliberation from analyzing trolling over time.

Finally, it would be worthwhile to explore to what extent individuals holding diverse points of view interact with one another outside of retweeting posts, especially around emotionally charged issues such as school shootings. Scholars find that emotions such as anger and anxiety – emotions that are relevant to school shootings – can cause individuals to believe inaccurate, partisan information, which, at best, may increase individuals’ perceptions that the public is polarized and that there are few opportunities for public deliberation, and, at worst, actually increase polarization and incivility (Weeks, 2015; Hwang et al., 2014). Given this research it would be interesting to see if individuals engage those holding opposing points of view in the wake of crises or simply lean into their political predilections. In a space known for its incivility, it is possible that crises are just another flashpoint for individuals to engage, but not consider, the positions of other users.

#### **FUNDING**

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the National Institute for Civil Discourse.



## REFERENCES

- Abril EP. (2016) Unmasking Trolls: Political Discussion on Twitter during the Parliamentary Election in Catalonia. *Trípodos* 39: 53-69.
- Bakshy E, Rosenn I, Marlow C, et al. (2012) The role of social networks in information diffusion. *WWW '12 Proceedings of the 21st international conference on World Wide Web*: 519-528.
- Bessi A, Zollo F, Vicario MD, et al. (2015) Trend of Narratives in the Age of Misinformation. *PLOS ONE*.
- Blom R, Carpenter S, Bowe BJ, et al. (2014) Frequent Contributors Within U.S. Newspaper Comment Forums. *American Behavioral Scientist* 58: 1314-1328.
- Borah P. (2014) Does It Matter Where You Read the News Story? Interaction of Incivility and News Frames in the Political Blogosphere. *Communication Research* 41: 809-827.
- Bradshaw S and Howard P. (2017) Troops, Trolls and Troublemakers: A Global Inventory of Organized Social Media Manipulation In: Woolley S and Howard P (eds) *Project on Computational Propaganda*. Oxford, UK: Oxford Internet Institute.
- Bromwich JE. (2017) Sam Hyde and Other Hoaxes: False Information Trails Texas Shooting. *The New York Times*.
- Charmaz K. (2014) *Constructing Grounded Theory*, Thousand Oaks, CA: Sage Publications Ltd.
- Coe K, Kenski K and Rains SA. (2014) Online and Uncivil? Patterns and Determinants of Incivility in Newspaper Website Comments. *Journal of Communication* 64: 658-679.
- Coen A. (2019) Changes in US Immigration Conversation Signal Departure from Responsibility Sharing. *The Globe Post*.
- Del Vicario M, Bessi A, Zollo F, et al. (2016) The spreading of misinformation online. *Proceedings of the National Academy of Sciences* 113: 554-559.
- Dubois E and Gaffney D. (2014) The Multiple Facets of Influence: Identifying Political Influentials and Opinion Leaders on Twitter. *American Behavioral Scientist* 58: 1260-1277.
- Eordogh F. (2016) How 4chan Tricked The Internet Into Believing This Comedian Is A Mass Shooter. *Forbes*.
- Gamson W and Meyer D. (1996) Framing Political Opportunity. In: McAdam D, McCarthy J and Zald M (eds) *Comparative Perspectives on Social Movements: Political Opportunities, Mobilizing Structures, and Cultural Framings*. Cambridge: Cambridge University Press, 275-290.
- Gamson W and Wolfsfeld G. (1993) Movement and Media as Interacting Systems. *The ANNALS of the American Academy of Political and Social Science* 578: 104-125.
- Gervais BT. (2015) Incivility Online: Affective and Behavioral Reactions to Uncivil Political Posts in a Web-based Experiment. *Journal of Information Technology & Politics* 12: 167-185.
- Graf J and Aday S. (2008) Selective Attention to Online Political Information. *Journal of Broadcasting & Electronic Media* 52: 86-100.
- Herbst S. (2010) *Rude Democracy: Civility and Incivility in American Politic*, Philadelphia, PA: Temple University Press.

- Hermida A. (2010) Twittering the news: The emergence of ambient journalism. *Journalism Practice* 4: 297-308.
- Hmielowski JD, Hutchens MJ and Cicchirillo VJ. (2014) Living in an age of online incivility: examining the conditional indirect effects of online discussion on political flaming. *Information, Communication & Society* 17: 1196-1211.
- Howard P and Kollanyi B. (2016) Bots, #Strongerin, and #Brexit: Computational Propaganda during the UK-EU Referendum. . *Political Bots*.
- Hwang H, Kim Y and Huh CU. (2014) Seeing is Believing: Effects of Uncivil Online Debate on Political Polarization and Expectations of Deliberation. *Journal of Broadcasting & Electronic Media* 58: 621-633.
- Hyvärinen J, Laajalahti A and Vos M. (2015) Enhancing citizen response to crises through communication : investigating expert views. *International Journal of Emergency Management* 11: 302-319.
- Iyengar S, Sood G and Lelkes Y. (2012) Affect, Not Ideology: A Social Identity Perspective on Polarization. *Public Opinion Quarterly* 76: 405-431.
- Kenski K, Coe K and Rains SA. (2017) Perceptions of Uncivil Discourse Online: An Examination of Types and Predictors. *Communication Research*.
- King G, Schneer B and White A. (2017) How the News Media Activate Public Expression and Influence National Agendas. *Science* 358: 776-780.
- Larkin RW. (2009) The Columbine Legacy: Rampage Shootings as Political Acts. *American Behavioral Scientist* 52: 1309-1326.
- LeFebvre RK and Armstrong C. (2018) Grievance-based social movement mobilization in the #Ferguson Twitter storm. 20: 8-28.
- McCosker A. (2014) Trolling as provocation: YouTube's agonistic publics. *Convergence* 20: 201-217.
- Mourão RR. (2015) The boys on the timeline: Political journalists' use of Twitter for building interpretive communities. *Journalism* 16: 1107-1123.
- Muddiman A. (2019) How People Perceive Political Incivility. In: Boatright R, Shaffer T, Sobieraj S, et al. (eds) *A Crisis of Civility? Political Discourse and Its Discontents*. New York: Routledge, 31-44.
- Mutlu B, Oztoprak K, Mutlu M, et al. (2016) Identifying Trolls and Determining Terror Awareness Level in Social Networks Using a Scalable Framework. *2016 IEEE International Conference on Big Data (Big Data)*.
- Mutz D. (2006) *Hearing the Other Side: Deliberative versus Participatory Democracy*, Cambridge, MA: Cambridge University Press.
- Nisbet M and Scheufele D. (2004) Political Talk as a Catalyst for Online Citizenship. *Journalism and Mass Communication Quarterly* 81: 877-896.
- Papacharissi Z. (2004) Democracy online: civility, politeness, and the democratic potential of online political discussion groups. *New Media & Society* 6: 259-283.
- Phillips W. (2015) *This Is Why We Can't Have Nice Things: Mapping the Relationship between Online Trolling and Mainstream Culture*, Cambridge, MA: The MIT Press.
- Polletta F and Lee J. (2006) Is Telling Stories Good for Democracy? Rhetoric in Public Deliberation After 9/11. *American Sociological Review* 71: 699-723.

- Price V, Cappella JN and Nir L. (2002) Does Disagreement Contribute to More Deliberative Opinion? . *Political Communication* 19: 95-112.
- Price V, Nir L and Cappella JN. (2006) Normative and Informational Influences in Online Political Discussions. *Communication Theory* 16: 47-74.
- Ragin C. (1989) *The Comparative Method: Moving Beyond the Qualitative and Quantitative Strategies*, Los Angeles: University of California Press.
- Rösner L and Krämer NC. (2016) Verbal Venting in the Social Web: Effects of Anonymity and Group Norms on Aggressive Language Use in Online Comments. *Social Media + Society* 2: 2056305116664220.
- Santana AD. (2015) Incivility Dominates Online Comments on Immigration. *Newspaper Research Journal* 36: 92-107.
- Sides J, Tesler M and Vavreck L. (2017) The 2016 U.S. Election: How Trump Lost and Won. *Journal of Democracy* 22: 34-44.
- Sobieraj S and Berry JM. (2011) From Incivility to Outrage: Political Discourse in Blogs, Talk Radio, and Cable News. *Political Communication* 28: 19-41.
- Staggenborg S. (1993) Critical Events and the Mobilization of the Pro-Choice Movement. *Research in Political Sociology* 6: 319-345.
- Stroud NJ. (2010) Polarization and Partisan Selective Exposure. *Journal of Communication* 60: 556-576.
- Suhay E, Bello-Pardo E and Maurer B. (2018) The Polarizing Effects of Online Partisan Criticism: Evidence from Two Experiments. *The International Journal of Press/Politics* 23: 95-115.
- Sunstein C. (2017) *#republic: divided democracy in the age of social media*, Princeton, NJ: Princeton University Press.
- Takahashi B, Tandoc EC and Carmichael C. (2015) Communicating on Twitter during a disaster: An analysis of tweets during Typhoon Haiyan in the Philippines. *Computers in Human Behavior* 50: 392-398.
- Theocharis Y, Barberá P, Fazekas Z, et al. (2016) A Bad Workman Blames His Tweets: The Consequences of Citizens' Uncivil Twitter Use When Interacting With Party Candidates. *Journal of Communication* 66: 1007-1031.
- Valente TW and Davis RL. (1999) Accelerating the Diffusion of Innovations Using Opinion Leaders. *The ANNALS of the American Academy of Political and Social Science* 566: 55-67.
- Waddell TF. (2018) What does the crowd think? How online comments and popularity metrics affect news credibility and issue importance. *New Media & Society* 20: 3068-3083.
- Walsh KC. (2007) The Democratic Potential of Civic Dialogue. In: Rosenberg S (ed) *Deliberation, Participation and Democracy: Can the People Govern?* New York: Palgrave Macmillan UK, 45-63.
- Weeks BE. (2015) Emotions, Partisanship, and Misperceptions: How Anger and Anxiety Moderate the Effect of Partisan Bias on Susceptibility to Political Misinformation. *Journal of Communication* 65: 699-719.
- Weeks BE and Garrett RK. (2014) Electoral Consequences of Political Rumors: Motivated Reasoning, Candidate Rumors, and Vote Choice during the 2008 U.S. Presidential Election. *International Journal of Public Opinion Research* 26: 401-422.
- Zhang L, Zhao J and Xu K. (2016) Who creates Trends in Online Social Media: The Crowd or Opinion Leaders? *Journal of Computer-Mediated Communication* 21: 1-16.

**Table 1. Narrative Category and Discourse Type\***

	<b>FSU</b>	<b>OSU</b>
<b>Narrative Category</b>		
Information	31.8%	14.5%
Disinformation	1.5%	25.2%
Misinformation	1.8%	8.9%
Personal narrative	54.6%	15.4%
Polemics	10.4%	35.9%
<i>Total</i>	<i>100%</i>	<i>100%</i>
	<i>N = 3,959</i>	<i>N = 2,037</i>
<b>Discourse Type</b>		
Civil	98.1%	64.3%
Uncivil	1.9%	35.7%
<i>Total</i>	<i>100%</i>	<i>100%</i>
	<i>N = 3,959</i>	<i>N = 2,037</i>

\*Note: Percentages may not equal 100% due to rounding.

**Table 2. Accounts with the Most (Re)Tweets in the Sample\***

	<b>Screen Name</b>	<b>Role</b>	<b># of Tweets in the sample</b>	<b># of Retweets in the sample</b>	<b>Total % of (Re)tweets in the sample</b>
<b>FSU</b>	PerezLocal10	local journalist	10	327	8.5%
	melinasphotos	local sport photographer	2	290	7.4%
	tjholmes	national journalist	8	174	4.6%
	TinaFBabby	FSU student	2	156	4.0%
	GarinFlowers	local journalist	16	87	2.6%
	Bipartisanism	national outlet	8	91	2.5%
	FSUeyedoc	local resident	3	69	1.8%
<b>OSU</b>	prponline	gun rights troll	16	205	10.8%
	notcurveme	Sam Hyde troll	3	157	7.9%
	roscoesbjones	Sam Hyde troll	2	103	5.2%
	samanthashaffe	individual	6	89	4.7%
	ess4emily	Sam Hyde troll	6	71	3.8%
	rajooweyn	racial justice activist	2	64	3.2%
	rex_caerulus	Sam Hyde troll	1	62	3.1%

\*Note: The percentages represent accounts with the most (re)tweets in the sample and do not total 100%.

**Table 3. Narratives on Twitter after FSU and OSU Incidents Days 1-7\***

	<b>FSU</b>	<b>OSU</b>
<b>Day 1</b>	PN: Thoughts/Prayers (19.3%) PN: Personal comment, non-student (13.7%) PN: FSU student comment (12.8%) PN: Pictures/videos of/from the incident (10.3%) I: Correct information, media source (8.4%) Total = 2,609	D: Incorrect information about assailant (29.5%) PN: Thoughts/Prayers (8.5%) P: Pro-gun, policy change (6.4%) P: Negative comment about Muslims/refugees (6.3%) P: Pro-gun, general (5.1%) Total = 1,803
<b>Day 2</b>	PN: FSU student comment (31.3%) I: Victim information, media source (20.4%) I: Information from law enforcement (12.1%) PN: Personal comment, non-student (8.3%) I: Correct information, media source (6.8%) Total = 265	P: Negative comment about Muslims/refugees (27.1%) D: Incorrect information about assailant (16.0%) P: Call for tolerance (12.8%) PN: Appreciation to law enforcement (11.7%) P: Pro-gun, general (10.6%) Total = 188
<b>Day 3</b>	PN: FSU student comment (33.1%) PN: Personal comment, non-student (13.3%) I: Victim information, media source (10.6%) P: Pro-gun control, general (10.6%) I: Assailant information, media source (9.7%) Total = 453	D: Incorrect information about assailant (40.0%) P: Call for tolerance (20.0%) P: Assailant is a terrorist (20.0%) I: Information about assailant, media source (10.0%) P: Comment on assailant's race/ethnicity (10.0%) Total = 10
<b>Day 4</b>	PN: FSU student comment (54.6%) P: Pro-gun control, general (12.3%) D: Shooting a hoax (11.5%) I: Assailant information, media source (6.2%) PN: Personal comment, non-student (3.9%)	D: Incorrect information about assailant (23.1%) PN: Personal comment, non-student (11.5%) P: Assailant is a terrorist (7.7%) P: Comment about assailant's race/ethnicity (7.7%) P: Negative comment about Muslims/refugees (7.7%) P: Pro-gun, general (7.7%)

	Total = 130	P: Call for tolerance (7.7%)	Total = 26
<b>Day 5</b>	I: Victim information, media source (48.5%) I: Victim information, another source (18.0%) PN: FSU student comment (13.0%)  PN: Personal comment, non-student (6.8%) D: Shooting a hoax (3.3%)	D: Incorrect information about assailant (25.0%) D: Stabbing was a hoax (25%) P: Negative comment about Muslims/refugees (25.0%) I: Official information from university (25.5%)	
	Total = 400		Total = 4
<b>Day 6</b>	PN: FSU student comment (24.6%) P: Pro-gun control, general (23.2%)  PN: Personal comment, non-student (20.3%) D: Shooting was a hoax (11.6%) P: Pro-gun, general (5.8%)	P: Comment about assailant's race/ethnicity (50%) D: Incorrect information about assailant (50.0%)	
	Total = 69		Total = 2
<b>Day 7</b>	PN: FSU student comment (39.4%) I: Victim information, another source (12.1%) I: Victim information, media source (12.1%) I: Correct information, media source (9.1%) PN: Personal comment, non-student (9.1%)	PN: Thoughts and prayers (50%) P: Pro-gun, general (50%)	
	Total = 33		Total = 4

\*Note: The percentages represent the most mentioned themes on a given day and do not total 100%.

**Table 4. Types of Stories and Debates Discussed in Coverage\***

		<b>FSU Story</b>	<b>OSU Story</b>	<b>FSU Debates</b>	<b>OSU Debates</b>
<b>Day</b>					
<b>1</b>	Basic story	18 (19.1%)	34 (38.6%)	Mental health issues (8.5%)	Responses to terrorism (3.4%)
	Fact-driven story	16 (17.0%)	16 (18.2%)	Need guns on campus (1.1%)	Immigration control (2.3%)
	Speculative story	1 (1.1%)	3 (3.4%)	Gun control (1.1%)	Racial/religious profiling (1.4%)
	Humanizing story	3 (3.2%)	5 (5.7%)		
	Human interest story	56 (59.6%)	30 (34.1%)		
				<b>FSU Total = 94</b>	<b>OSU Total = 88</b>
<b>Day</b>					
<b>2</b>	Basic story	20 (37.7%)	40 (35.4%)	Mental health issue (43.4%)	Racial/religious profiling (8.9%)
	Fact-driven story	4 (7.6%)	16 (14.2%)	Gun control (1.2%)	Responses to terrorism (7.1%)
	Speculative story	9 (17.0%)	8 (7.1%)	Need guns on campus (1.2%)	Need guns on campus (2.7%)
	Humanizing story	6 (11.3%)	1 (0.9%)	-	Immigration control (2.7%)
	Human interest story	14 (26.4%)	48 (42.5%)	-	
				<b>FSU total = 53</b>	<b>OSU Total = 113</b>
<b>Day</b>					
<b>3</b>	Basic story	4 (40.0%)	21 (39.6%)	Mental health issue (40.0%)	Immigration control (22.6%)
	Fact-driven story	-	4 (7.6%)	-	Racial/religious profiling (11.3%)
	Speculative story	-	6 (11.3%)	-	Responses to terrorism (7.6%)
	Humanizing story	1 (10.0%)	2 (3.8%)	-	Need guns on campus (7.6%)
	Human interest story	5 (50.0%)	20 (37.7%)	-	
				<b>FSU Total = 10</b>	<b>OSU Total = 53</b>
<b>Day</b>					
<b>4</b>	Basic story	3 (50.0%)	10 (45.5%)	Mental health issue (16.7%)	Responses to terrorism (18.2%)
	Fact-driven story	-	1 (4.6%)	-	Need guns on campus (13.6%)
	Speculative story	-	1 (4.6%)	-	Immigration control (9.1%)
	Humanizing story	1 (16.7%)	-	-	Racial/religious profiling (9.1%)



	Human interest story	2 (33.3%)	11 (50.0%)	-	-
				<b>FSU Total = 6</b>	<b>OSU Total = 22</b>
<b>Day</b>					
<b>5</b>	Basic story	1 (33.3%)	3 (23.1%)	Mental health issue (33.3%)	Racial/religious profiling (30.8%)
	Fact-driven story	-	-	-	Religious rights (15.4%)
	Speculative story	-	1 (7.7%)	-	Need guns on campus (7.7%)
	Humanizing story	-	1 (7.7%)	-	Immigration control (7.7%)
	Human interest story	2 (66.7%)	8 (61.5%)	-	-
				<b>Total = 3</b>	<b>Total = 13</b>
<b>Day</b>					
<b>6</b>	Basic story	4 (44.4%)	-	Mental health issue (33.3%)	Immigration control (33.3%)
	Fact-driven story	-	-	Gun Control (11.1%)	Religious rights (33.3%)
	Speculative story	-	-	-	-
	Humanizing story	-	-	-	-
	Human interest story	5 (55.6%)	3 (100.0%)	-	-
				<b>FSU Total = 9</b>	<b>OSU Total = 3</b>
<b>Day</b>					
<b>7</b>	Basic story	1 (100.0%)	2 (28.6%)	Need guns on campus (100%)	Immigration control (28.6%)
	Fact-driven story	-	-	-	Gun Control (28.6%)
	Speculative story	-	-	-	Religious rights (14.3%)
	Humanizing story	-	-	-	Racial/religious profiling (14.3%)
	Human interest story	-	5 (71.4%)	-	Responses to terrorism (14.3%)
				<b>FSU Total = 1</b>	<b>OSU Total = 7</b>

Note: The percentages for debates mentioned should not equal 100% because not all stories included these codes.

**Table 5. Sources Most Mentioned in Mainstream Coverage\***

<b>Source Mention</b>	<b>FSU</b>	<b>OSU</b>
Law Enforcement	46.6%	60.9%
Perpetrator	32.0%	79.8%
Victims	50.0%	29.8%
College Student	69.1%	49.0%
Muslim Student	0.0%	3.3%
Friend of Perpetrator	18.5%	1.7%
University Administrator	18.5%	19.5%
Politician	16.9%	32.1%
President Obama	0.6%	6.0%
President-Elect Trump	0.0%	12.9%
Muslim Organization	0.0%	4.3%
<b>Total # of Stories</b>	<b>178</b>	<b>302</b>

\*Note: The percentages will not equal 100% since more than one kind of actor may be included in a news story.