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Evan Frederick Ann Pegoraro Lauren Burch

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Echo or organic: framing the 2014 Sochi Games

Evan Frederick
University of New Mexico, Albuquerque, New Mexico, USA
Ann Pegoraro
*Department of Sport Management and Marketing,
Laurentian University, Sudbury, Canada, and*
Lauren Burch
*Department of Business, Indiana University-Purdue University Columbus,
Columbus, Indiana, USA*

Abstract

Purpose – The purpose of this paper is to perform a comparative analysis of how traditional media and social media framed the 2014 Sochi Winter Olympic Games.

Design/methodology/approach – The researchers examined newspaper articles pertaining to the Sochi Olympics and Tweets containing #SochiProblems to determine if differences or overlap existed in terms of themes and frames. A thematic analysis was conducted with the qualitative software Leximancer.

Findings – An analysis of 2,856 newspaper articles and 497,743 Tweets revealed three frames across the two media platforms including: the setting, the politics, and the games. There was both a divergence and convergence of content. While there was an echo chamber in terms of discussions regarding political controversies, organic content related to conditions and accommodations existed primarily on Twitter.

Originality/value – This study sought to investigate whether organic content on Twitter could withstand the transference of sentiments that emerge in traditional media. This study adds to the current body of the literature by examining whether there is a convergence or divergence of content across media platforms pertaining to an international sporting event.

Keywords Russia, Framing, Olympics, Twitter, Sochi

Paper type Research paper

Before the 2014 Sochi Winter Olympic Games even began, they were shrouded in controversy. Allegations of corruption, lavish spending (roughly $51 billion), and outrage over the "homosexual information" law firmly placed a critical eye on Sochi (Bowring, 2014). The city/country did itself no favors in diverting that criticism and bolstering their public image. As early as February 4 (three days before the opening ceremony), journalists began live-tweeting their experiences in Sochi regarding undesirable hotel accommodations and undrinkable water (Dewey, 2014). That same day, the Twitter handle @SochiProblems was created by Alex Broad, a 20-year old student at Centennial College in Toronto (White, 2014). Within 48 hours of its creation, @SochiProblems had over 100,000 followers (Eggertsen, 2014). Along with following the @SochiProblems account, Twitter users quickly adopted #SochiProblems and began creating critical and often humorous Tweets about the games.

Scholars have argued that social media platforms such as Twitter allow for greater control of content among everyday individuals (Sanderson, 2011), providing them with a platform to put their voice on display (Clavio, 2013). Twitter also enables users to bypass traditional media (Sanderson, 2010), and provides immediacy of information

(Sanderson and Hambrick, 2012). Additionally, Twitter allows individuals to bring issues to prominence and to frame and reframe those issues in order to continue dispersion (Meraz and Papacharissi, 2013). While Twitter is an important vehicle in the early stages of news dissemination (van der Meer and Verhoeven, 2013), scholars contend that social media functions differently from traditional media (DeLuca *et al.*, 2012). In fact, existing research has found that these two forms of media diverge when reporting major events (Billings *et al.*, 2015).

The purpose of this study was to perform a comparative analysis of how traditional media and social media framed the 2014 Sochi Winter Olympic Games. Specifically, the researchers examined newspaper articles pertaining to the Sochi Winter Olympic Games and Tweets containing #SochiProblems to determine if differences or overlap existed in terms of themes and frames. The researchers chose to compare #SochiProblems with newspaper articles to ascertain whether the narratives emerging on Twitter were informing or influencing the content of newspapers (i.e. bottom-up framing) or whether newspapers were in fact informing the narratives that emerged in #SochiProblems Tweets (i.e. top-down framing). Additionally, this study sought to investigate whether organic content on Twitter could withstand the transference of sentiments that emerge in traditional media. This study adds to the current body of the literature by examining whether there is a convergence or divergence of content across media platforms pertaining to an international sporting event.

Review of literature
Framing
Communication scholars have examined the process of mass media framing on various issues in political and health communication (e.g. Andsager, 2000; Heldman *et al.*, 2005; Major and Coleman, 2008). In addition, the power of media framing has been documented, and found to affect the opinions, perceptions, and attitudes of audiences toward these issues (e.g. Druckman, 2001; Tewksbury *et al.*, 2000). Originally defined by Goffman (1974) as mental schemas that facilitate the rapid processing of information in everyday life, when frames are employed in a communicating text, aspects of issues can be made more salient to audiences. This is accomplished through the selection and emphasis of certain aspects at the exclusion of other aspects (Entman, 1993). When news media select, emphasize, and exclude aspects of certain issues, they assist in the establishment of meaning regarding these issues (Zaharopoulos, 2007). In addition to the selection and emphasis function, cultural references can bound the interpretation of frames based upon the dominant social norms that exist within a particular society (Endres, 2004; Goffman, 1974).

Framing, from a sports perspective, has been employed to examine issues surrounding mega-sporting events. One event that has been the subject of various framing studies is the Olympic Games. The most predominant issues examined from a framing perspective in regard to the Olympic Games have been related to race, gender, and nationality (e.g. Angelini *et al.*, 2014; Billings *et al.*, 2014b; Eagleman *et al.*, 2014; Zaharopoulos, 2007). Due to the cultural references and social norms that are included in the framing process, studies have also investigated framing and the Olympics in regard to social or political issues within a country. For example, framing of the Olympic Games has been investigated from country-specific perspectives such as China and Canada, who hosted the 2008 Beijing Olympic Games and 2010 Vancouver Olympic Games, respectively (i.e. Huang and Fahmy, 2013; Liang, 2010; van Luijk and Frisby, 2012).

The examination of the framing of political issues outside traditional forms of mass media (i.e. print and broadcast) is increasingly relevant as new media platforms such as Facebook and Twitter can expand the potential reach of news and information through the rapid dissemination of information (Sanderson and Hambrick, 2012). Additionally, these platforms provide individuals the ability to advance certain frames or reframe issues (Meraz and Papacharissi, 2013). This was illustrated through various political movements in Egypt such as Kefaya, the April 6 Youth, we are all Khaled Said, and the events in April 2011, known as Arab Spring, in which social media provided outlets for the construction of social networks and increased awareness of opposition efforts (Hamdy and Gomaa, 2012; Lim, 2012). Thus, this perspective was employed in this study. The investigation and framing of content produced by individuals, and not from media or news outlets is a process identified by Nisbet (2010) as the "bottom up model of framing" (p. 75). The bottom-up framing process focusses on individuals who are consistent producers of online media, and therefore actively contribute in content creation (Nisbet, 2010). Specially focussing on social media in political communication, recent studies have employed a bottom-up framing process to examine the content around elections in the UK (Ampofo *et al.*, 2011) and the USA (Groskek and Al-Rawi, 2013; Hawthorne *et al.*, 2013) as well as political events such as Arab Spring (Meraz and Papacharissi, 2013). The bottom-up approach to framing provides scholars with the opportunity to investigate the framing of issues within various contexts from the perspectives of individuals on platforms such as Twitter.

Twitter and sport communication

Sport communication research that has examined Twitter use has largely focussed on the content produced by professional athletes (e.g. Hambrick *et al.*, 2015; Hull, 2014), college athletes (e.g. Browning and Sanderson, 2012) or fans (e.g. Blaszka *et al.*, 2012; Coche, 2014; Frederick *et al.*, 2012). Expanding upon content creation and focussing on social issues within sport, recent studies have examined athlete self-presentation and framing on Twitter (Burch *et al.*, 2014; Lebel and Danylchuk, 2012). From a media-based perspective, studies regarding Twitter and its integration into sports journalism and media relations have recently emerged (e.g. Gibbs and Haynes, 2013; Sheffer and Shultz, 2010). However, these investigations focussed more on individual journalists or media practitioners and less on coverage within sport. Integrating the foci of social media research from a theoretical and media standpoint, Sanderson and Hambrick (2012) examined the framing of the sporting scandal around Penn State Football on Twitter by sports journalists.

The current body of sport related, Twitter research has expanded from its original focus on usage trends and content analysis to now include a wider, theoretical examination of social or political issues in sport. The Olympics provide an area for nations and their respective political ideologies to clash, sometimes resulting in boycotts by nations as happened in the 1980 and 1984 Games. In commenting on these boycotts, Whannel (1983) indicated that anyone would be hard pressed to say ever again that sport has nothing to do with politics. The advent of social media sites has provided platforms for engaged citizenship; marrying this with the political nature of sport should produce a new avenue for political advocacy (Butterworth, 2014). As noted, the Olympics can bring additional focus to the larger political or social issues surrounding a country and social media can provide a platform for citizens to address these issues (Butterworth, 2014). In the case of the Sochi Winter Olympics, Twitter played a role in the identification and discussion of such issues, through

#SochiProblems. This represented a unique opportunity to employ a bottom-up framing method to examine such an occurrence and compare this content to the themes and frames produced in traditional media.

Study rationale and research questions

Addressing Nisbet's (2010) argument for more research in this area, and expanding upon current research employing this approach (e.g. Ampofo *et al.*, 2011; Meraz and Papacharissi, 2013), this study examined the user-generated content produced around #SochiProblems to determine how the event was framed. Newspaper articles were also examined to determine if bottom-up framing was indeed present or if traditional media was responsible for informing the content on social media (i.e. top-down framing). Furthermore, the intention of this analysis was to determine if overlap or differences existed across the media platforms in terms of themes and frames. This approach is similar to the work of Billings *et al.* (2015) who found a divergence between traditional media and social media content. This study was guided by the following research questions:

RQ1. What themes and frames will traditional media (i.e. newspaper articles) utilize to discuss the Sochi Olympics?

RQ2. What themes and frames will Twitter users employ when utilizing #SochiProblems?

RQ3. How do these themes and frames change over time across media platforms?

Methodology

Newspaper articles were collected through the Lexis-Nexis search engine. The search terms "Sochi" and "Olympics" were utilized to find a large sample of articles. After duplicate articles were removed, a total 2,856 articles were retrieved. In order to examine nuances and trends in content over time, the data set were broken up into five time periods including February 5-6 (prior to the games), February 7 (opening ceremony), February 8-14 (first week of the games), February 15-23 (second week of the games, including closing ceremony), and February 24 (post games). The articles were placed in separate files according to time period and then uploaded to Leximancer for analysis.

Hashtag data were collected with the data collection tool Hashtracking from February 5 through February 24, resulting in a sample of 497,743 Tweets from 321,165 unique contributors. Hashtracking allows users to enter a hashtag and collect Tweets on that hashtag for a specified period of time. Data can be exported as a CSV for further analysis by researchers.

Hashtracking has been used in previous research to monitor eWOM around the Olympic Games (Pegoraro *et al.*, 2015). The lists of contributors were separated out from the Tweets for a separate analysis to understand who took part in the development and spread of this temporal hashtag. A separate CSV file for each time period (as described above) was uploaded and analyzed qualitatively with Leximancer.

Leximancer software

Leximancer is a computer software tool that conducts conceptual (i.e. thematic) and relational (i.e. semantic) analysis on written words as well as visual text (Bals *et al.*, 2012). An advantage of the automated approach of Leximancer to generating the

concept list (i.e. descriptors) is that the list is statistically reliable and reproducible, as it is generated from the input text itself, whereas manual lists require checks for coding reliability and validity (Angus *et al.*, 2013). Leximancer is considered a more objective analytic tool as researcher bias, coder reliability, and subjectivity are all removed from the analysis process (Sotiriadou *et al.*, 2014). Additionally, the ability to analyze very large data sets in totality, instead of using a subsample with human coders allows researchers to consider complete samples and draw more concrete conclusions from these data sets. One of the advantages of Leximancer is that analysis begins with only a few seed words and then can go on to analyze vast sets of texts that contain a large number of concepts, making it an effective tool to analyze blogs, user comments, and social media posts (Bals *et al.*, 2012). Therefore, it was deemed the proper data analysis tool for the current study. Leximancer does not generate counts for its thematic outputs. Rather it presents themes in terms of their relevance and connectivity within the larger data set.

Leximancer has been used to analyze opinion polling and political commentary (McKenna and Waddell, 2007), assess tourism event images (Scott and Smith, 2005), and identify risk themes, by examining business reports and corporate data (Martin and Rice, 2007). In the online realm, researchers have used Leximancer to analyze website content of state tourism authorities (Kattiyapornpong and Nel, 2009) and map consumer-generated conversations around online advertisements (Campbell *et al.*, 2011). Most recently, Billings *et al.* (2014a) utilized Leximancer to determine differences in Tweet content from a nationalistic perspective during the 2014 World Cup in Brazil, while Pegoraro *et al.* (2015) analyzed the hijacking of #CheerstoSochi.

While computational approaches are a valid method for examining large data sets of text (Indulska *et al.*, 2012), human contributions to data analysis are paramount (Neuendorf, 2002). Therefore, once Leximancer had completed its analysis, the researchers viewed and extensively discussed the software's findings. This involved combing through long lists of descriptors, quotes, and Tweets within the themes to firmly grasp not only what was being discussed but the sentiment with which it was being discussed. Themes operate as "miniframes" (Altheide, 1996, p. 30) or reoccurring concepts within text that provide general meaning to a reader. This step was necessary as a computer is unable to code for the context of content (Macnamara, 2005). Once a complete understanding of the themes was attained, the researchers engaged in axial coding, which is when themes are regrouped or reduced into frames based upon similar dimensions (Saldana, 2009). It is important to note that Leximancer does not name a theme based on context. Rather, it names a theme based upon the most prominent keyword (i.e. descriptor). However, all content within a theme has a similar context. Instead of renaming the themes, the researchers reduced the themes into frames based upon similarity in context and subsequently named the frames to accurately describe the emergent context. This two phase approach, allowed both human coding and computer coding to be present in the analysis. This enabled the researchers to examine a large data set that would not have been feasible to analyze with traditional methods.

Results and interpretation
The first step in the analysis involved an investigation of the list of Twitter contributors to determine who was participating in the community. Throughout all time periods, the top users list did not contain any mass media institutions (e.g. @nytimes), mass media members (e.g. @AndersonCooper), or bloggers (e.g. @Huffington Post). This identification scheme was in line with previous research that identified Twitter actors in regard to media

classification (Meraz and Papacharissi, 2013). In order to address *RQ1* and *RQ2*, Leximancer was utilized to determine the themes within newspaper articles and #SochiProblems Tweets. From there, the researchers explored and discussed the data and reduced the themes into frames. The primary emergent themes will be discussed with quotes and Tweet examples provided. The quotes and Tweets are listed verbatim. Instead of including links, the (link) notation is provided.

RQ1 (newspaper themes and frames)
A total of nine prominent themes emerged in Leximancer analysis of newspaper articles. These themes included Sochi, Russia, time, Olympic, Olympics, medal, games, team, and Canada. Once the researchers had thoroughly analyzed and discussed Leximancer findings regarding the emergent themes, axial coding was conducted (see Saldana, 2009). All of the emergent themes were condensed into two frames: the politics and the Games. The politics frame contained the three themes of Sochi, Russia, and time and illustrated the sociopolitical issues surrounding Russia. In regard to this frame, focus was placed not on athletic performance, but on the host country and various political controversies including Russia's policies on gay rights. Examples of statements within the politics frame included, "Tomorrow the Mayor of Vancouver is coming. But, according to Russian politicians such as Sochi Mayor Anatoly Pakhomov, the Russian riviera doesn't have any gay citizens," "There was the threat of terrorism. The backlash to Russia's anti-gay law," and "[…] Political controversies and the Olympics are old friends."

Conversely, included in the Games frame were the six remaining themes of Olympic, Olympics, medal, games, team, and Canada. The Games frame focussed solely on the Olympic Games as a sporting event, and provided the audience with more neutral coverage including discussions of athletic performances, medal counts, and the successes or failures of particular teams and countries. For example, "Julia Mancuso's three Alpine Olympic medals are the most for an American woman," "Both the men's and women's teams are in good shape this season and they are strong enough for the gold medals," and "After the breathtaking semi-final win over the USA, Canada rendered the gold-medal final boring, almost."

RQ2 (Twitter themes and frames)
Leximancer analysis of Tweets containing #SochiProblems revealed 14 themes. These themes included mistake, water, hosting, thoughts, protecting, take, bobsledder, water (second occurrence), Sochi2014, Sochi, Opening, Olympic, Sochi (second occurrence), and Sochiprobiem. Once again, axial coding was conducted. All of the emergent themes were condensed into three frames: the setting, the politics, and the Games. While the politics and the Games frames were similar across traditional and social media, Twitter dialogued introduced the setting theme. The setting was the most predominant frame employed by individuals on Twitter, and included the themes mistake, water, hosting, thoughts, protecting, take, bobsledder, water (second occurrence), Sochi2014, and Sochi. The overarching sentiments contained in this frame highlighted social or cultural differences through the discussion of unsuitable accommodations and conditions in Sochi. Tweets within this frame portrayed Russia in a negative light. Examples of Tweets dedicated to the setting included, "RT @SochiProblems: How to survive hotel in #Sochi: #SochiProblems #Sochi2014 #Olympics (link)" and "A bobsledder had to bust down a bathroom door with his sled because the door jammed while he was inside. #sochiproblems #sochiolympics."

The politics frame contained the themes of Opening and Olympic. Both themes in the politics frame highlighted the anti-gay political policies in Russia. These tweets often took a humorous approach when discussing a larger social issue. For example, "RT @AndySzekeres: I'm not looking forward to the opening ceremony at #Sochi2014. Just think how bad it will be with out the #gays planning," and "Hey Russia, ever notice all those colors in the Olympic rings kind of look like a rainbow? Gay huh?" It was not until the second week of competition, which occurred from February 15-23 that discussions regarding athletic competitions occurred in conjunction with #SochiProblems. Within the frame of the Games, the themes of Sochi and Sochiprobiem appeared. An example of a Tweet within the Games frame stated, "@christaa_s: @Sochi_Problemz: Swedish skier Henrik Harlaut #SochiProblems (link) crying cause he should have gotten gold??"

RQ3 (change over time)

Newspapers. Prior to the opening ceremony, both the politics and Games frames were present in newspaper coverage on February 5-6. The themes of Sochi and Russia were present from the politics frame, while the Olympic, medal, games, and team themes were present from the Games frame. During this time period, coverage of the Olympics contained political sentiments regarding Russia and its social policies. However, neutral coverage promoting the event, athletes, and teams was present as well, perhaps with a stronger emphasis.

On February 7, there appeared to be greater focus placed on coverage of the Games, with the themes of Olympics, games, and team all present from the Games frame. The only theme present from the politics frame was the continued, consistent emphasis of the Sochi theme from February 5-6 coverage. While the theme of team within the Games frame included a consistent emphasis on athletes and teams, closer examination of the utilization of the themes Olympics and games illustrated a divergence from the previous time period. The games theme has been previously employed to discuss preparations for the Sochi Olympics during the February 5-6 time period. However, on February 7, this theme also included coverage regarding the lack of preparedness by the host country, and contained a more negative depiction of Russia. Whereas the theme Olympics had been used in regard to promotion of the event, in this time period the theme was more representative of the politics frame, and contained discussion of the human rights issues surrounding Russia. As a result of this shift in employment of themes, overarching coverage of the Sochi Olympics was framed to emphasize the sociopolitical elements surrounding Russia.

The differing utilization of themes within the two frames would continue during the first week of the Olympics. February 8-14 included a more equitable focus in regard to the employment of frames. The theme of medal, which was first present during the February 5-6 time period returned and was consistent in its employment in the Games frame. The Olympic theme that had been used in a political sense during the February 7 timeframe, and as part of the politics frame, shifted again to a more technical utilization to represent coverage of events as part of the Games frame. The games theme continued its consistent emphasis in coverage, and also its utilization to address political issues as part of the politics frame. The theme of Russia reappeared in coverage, as it was first present during the February 5-6 time period. This theme was employed in a consistent manner to emphasize Russia's political stance as part of the politics frame. In addition to these two themes a new theme emerged in coverage, which was time. In this instance, the time

theme was incorporated as part of the politics frame in regard to the timing of anti-Russia coverage to coincide with the Olympic Games. The themes of medal and time reoccurred during the subsequent time period. However, while the usage of the medal theme remained consistent, the time theme shifted in meaning.

During the second week of athletic competition (i.e. February 15-23), the framing and emphasis of overall content moved toward neutral, athletic based coverage in the Games frame. Specifically, the themes of medal and time were employed and shifted coverage toward the events. The medal theme remained static in its usage. However, the time theme that was previously employed to discuss the timing of anti-Russian coverage was used in this period to emphasize athletic performance. This represented a complete shift in usage, and also assisted in the emphasis of athletic coverage as opposed to political issues. Solely representative of the political issues surrounding the Games, and the politics frame during this time period was the theme of Sochi.

The final timeframe of analysis focussed on the day following the closing ceremony, February 24. Following the conclusion of the Olympic Games, coverage emphasized reflective analysis of the political issues brought to light as a result of hosting the event. The themes of Sochi and Russia were used in a consistent manner as in previous timeframes to discuss political issues surrounding Russia, while the Olympics theme shifted once more, and was representative of the long-term economic impact of the Games and anti-gay sociopolitical issues. Themes representative of the Games frame were medal and Canada. Again, the medal theme was employed in the same fashion, while the theme of Canada appeared for the first time in coverage, and was likely the result of coverage from the gold medal Canadian ice hockey match that took place at the end of the Olympic Games.

Twitter. With regard to #SochiProblems utilization on Twitter, it is interesting to note that the themes contained in the setting frame occurred throughout the duration of the Games, beginning with mistake on February 5 and ending with Sochi on February 24. This progression from theme to theme throughout the Games suggests that the reframing practices highlighted by Meraz and Papacharissi (2013) may have occurred.

The first two themes in the setting frame, mistake and water, appeared on February 5-6, and were closely followed by the next two themes in the frame, hosting and thoughts, which were first employed by individuals on February 7. All themes during this two-day time period focussed on accommodations or conditions. The thoughts theme also appeared to serve dual roles in that it continued the discussion of accommodations, while also allowing for users to introduce the second identified frame of politics.

The first theme contained in the frame of politics was opening, and it referenced the opening ceremonies, which took place on February 7. This date is where the frames of politics and the setting occurred simultaneously, as opening, and the second theme within the politics frame, Olympic, emerged. Just as the thoughts theme in the setting frame encompassed two overarching topics, the Olympics theme in the politics frame served the same role, and transitioned the discussion from Russia's anti-gay politics to the insufficient conditions and the setting frame.

During the first week of the Olympic Games from February 8-14, the discussion on Twitter focussed predominately on the setting frame, during which the themes of protecting, take, bobsledder, and the second occurrence of water emerged. All of these themes highlighted cultural differences between countries through the sub-standard conditions in Sochi. In addition, the take theme contained references to political corruption in Russia, which enabled the politics frame to reemerge, albeit briefly.

At this same time, online discussion began to contain content specifically related to the athletic competitions, and enabled the emergence of the Games frame on Twitter.

These themes, and the larger Games frame, could have emerged largely due to popular sports such as figure skating or ice hockey occurring during this timeframe (February 15-23), as they were specifically referenced in Tweet content. For example, a hockey game between the USA and Canada was included in Tweets related to the Sochiprobiem theme, and shifted the focus of content away from the social or cultural issues previously discussed. This shift in content focus was temporary, as commentary within this theme transitioned again to the sentiments present at the beginning of the Sochi Olympics with the reemergence of the settings frame.

The final two themes that emerged on February 24 were Sochi2014 and Sochi. Both themes were representative of the setting frame, and contained dialogue that encompassed not only the closing ceremonies but also content relating to the social or culturally focussed accommodations and conditions. As such, sentiments that had been expressed relating to these topics in previous themes appeared to have been reframed to further their prominence in the overarching discussion relating to the Sochi Olympics on Twitter.

Discussion

The purpose of this study was to determine whether there was a convergence or a divergence of content pertaining to the Sochi Winter Olympic Games across traditional and social media. Furthermore, this study intended to highlight whether top-down and/or bottom-up framing were present. Across the two media platforms, three frames emerged including the setting, the politics, and the Games. Data analysis revealed that both an echo chamber and organic content were present. Specifically, both newspaper articles and #SochiProblems Tweets discussed political controversies (i.e. the politics) such as terrorism and gay rights. Newspaper articles began discussing these issues during the first time period (i.e. February 5-6), while Tweets during this same time period focussed primarily on subpar conditions and accommodations within Sochi. It was not until February 7, that Tweets began to discuss the LGBT community and gay rights issues. Newspaper articles continued to discuss these issues throughout the Games, including prior to the opening ceremony on February 7. In that sense, one could argue that top-down framing was indeed present as Twitter users seemed to echo content trends that emerged on traditional media with regard to political issues and controversies in Russia.

Another key finding was that both newspaper articles and Twitter focussed attention on reporting athletic performances, medal counts, and general excitement for Olympic events (i.e. the Games). The unique aspect of this finding was the amount of time dedicated to this type of coverage. While newspaper articles reported on the Games throughout the entire timeframe of analysis, Twitter users primarily discussed the Games only during the second week of events (February 15-23). Overall, it appeared that the individuals who were utilizing #SochiProblems were less interested in reporting sporting events compared to newspapers, who maintained relatively consistent coverage throughout the month. This finding makes sense, considering that #SochiProblems was initially utilized as a mechanism for poking fun at Sochi's accommodations and to some extent, Russia's political policies. Therefore, one could surmise that dialogue dedicated to the setting and politics would persist throughout the event on Twitter, while discussions related to the Games would have a relatively short

shelf life. The "seepage" of the Games frame into social media reflects similar results found by Delgado (2003) in traditional media where newspapers had difficulty presenting a singular, let alone unified, frame around an Iran-USA soccer match and that seepage invited media consumers to focus on various elements within the frame including the politics of the nation's competing. In the results herein we see the opposite seepage, where a hashtag formulated to focus on issues related to Russia's lack of preparedness for the Games and their social and political issues, experienced a seepage of content related to Games outcomes (i.e. medals, performances) for a least one week of the Games time period.

While an echo chamber was present with regard to political issues and controversies, the setting frame, which dealt primarily with accommodations and conditions in Sochi, was organically conceived on Twitter. The genesis of these Tweets was journalists and other attendees tweeting out images of unfinished hotel rooms on February 4. This led to the creation of #SochiProblems and its use as a digital pedestal for ridicule. While one could argue that journalists and other attendees were the first to Tweet out images of subpar hotel rooms, they were not the first to use this particular hashtag. In fact, as stated in the results, an analysis of #SochiProblems users revealed that no official media outlet or journalist accounts were associated with these Tweets. Furthermore, journalists in this particular data set did not report issues related to accommodations within newspaper articles. Instead, a collective of Twitter users jumped on the bandwagon of a hashtag and used it to create scathing and often humorous criticisms of Sochi's accommodations. In that sense, bottom-up framing as defined by Nisbet (2010) was somewhat present. However, the dialogue that was set in motion by users on Twitter appeared to circulate within the social media world without being amplified by traditional media. It is perhaps not surprising that journalists did not write about the accommodations issues after their first few tweets as often they must self-censor to protect their jobs (Corrigan, 2014). Indeed, often corporate media owners and management exert control over media content (Corrigan, 2014) and ultimately journalists end up not writing the stories that would negatively effect the interests of their ultimate boss, the corporate owners and their associates.

Overall, these findings lend support to DeLuca *et al.*'s (2012) claim that social media and traditional media function differently from one another. While Twitter did seem to feed off of traditional media in terms of discussing politics, most of the social media dialogue focussed on conditions and accommodations in Sochi. Furthermore, when Twitter users mentioned political issues in Russia, it was usually done in either a sarcastic or humorous tone, while newspaper articles took the more serious route by framing contentions regarding Russia within larger social, political, and economic contexts. This divergence could be due in part to the nature of Twitter as a platform that makes it difficult to provide nuanced comments and insights within the 140-character limit. Additionally, this study is unique in that it runs counter to Billings *et al.* (2015), who found that social media and traditional media diverge when reporting sport-related events. In this particular instance, both a divergence and a convergence of content were present. This could be due to the current study analyzing the two media platforms for nearly three weeks, which provided more time for both patterns to emerge in the analysis. Perhaps international sporting events are more likely to garner some reliance on a traditional media agenda among social media users who are simultaneously seeking and creating content. In addition, sport events or spectacles are often seen as sanctioned escapes from everyday life, from the "alienation of industrial and postindustrial capitalism" (Corrigan, 2014, p. 45). As such, the chatter around

sports is seen as distracting individuals from more pressing social and political issues until well after the event has concluded (Corrigan, 2014). Therefore, perhaps the increase in sport-related coverage in traditional media throughout the Games is to be expected and the diverging content on social media represents the attempts by individuals to keep the focus on the social and political issues at hand.

Based on the sheer amount of Tweets and unique non-media-related contributors who utilized #SochiProblems, this study highlights how organically generated content can quickly become viral on Twitter. While an official Olympic Games hashtag (i.e. #Sochi2014) and multiple marketing hashtags (#cheerstosochi, #CelebrateWithaBite, etc.) existed, #SochiProblems was unique in that it served no marketing or promotional purpose. It had no organized corporate or political agenda driving its content. Instead, it provided an outlet for individuals to express wide-ranging criticisms of the Games and attack Russia's status as a nation. By discussing (and often criticizing) inadequate conditions and accommodations that did not meet western standards, and discriminatory political practices, Twitter allowed users to engage in a discussion of cultural or sociological issues on a global stage. This discussion was both in line and divergent from traditional media. From a practical perspective, politicians and mega-event planners should also monitor Twitter to identify alternative or unique criticisms that manifest outside of the criticisms present in traditional media.

Implications beyond the sport setting

Within the realm of online information, this study has multiple implications. First, the findings of this study indicate that Twitter's ability to infiltrate and impact content trends within the traditional media sphere is perhaps more muted than many would like to believe. While certain unique topics appeared to emerge on Twitter, those topics did not get discussed in this data set of newspaper articles. In this particular instance, there was little to no ripple effect from social media to traditional media. The hashtag (like many others) lived and died on Twitter, circulating among a relatively face-less sect of users whose criticisms and critiques landed softly among the masses of diversionary dialogues that appear on this social media platform each day. Perhaps the perceived power of a hashtag has been diluted by the saturation of user generation, which in turn warrants limited attention from traditional media sources that perhaps view these conventions as a drop in the bucket.

Additionally, a continuing story has been cutbacks in coverage at local and regional newspapers (Nisbet, 2010), massive layoffs of journalists (CBC, 2016), and closure of some newspapers (*The Canadian Press*, 2016). Additionally, the establishment of media conglomerates (Pittis, 2014) has limited the number and variety of independent news outlets available to citizens. Research has shown that mainstream news providers must follow their corporate owners' wishes and many times what passes for selectivity in what is reported, is in fact consistent media bias (Swirski, 2013). Together all of these factors have left many communities and individuals without relevant news and information on events and thus social media has filled this void. With this increase dependence on social media for news, the results of this study provide insight into where traditional media and social media converge and diverge in their coverage of major news events indicating that the rise of social media has undoubtedly weakened the agenda setting power of traditional news media, though some convergence continues to be present.

Finally, although social media has weakened the agenda setting power of traditional media, to truly capitalize on the ability of social media to increase awareness of issues and influence opinions of individuals, users driving a particular perspective need to

overcome the short half-life of tweets by increasing the "stickiness or traction" (Meraz and Papacharissi, 2013, p. 144) of hashtags. According to Meraz and Papacharissi (2013) "Hashtags that gain popularity in this bottom-up manner function as a public signal for the ad hoc framing of the event, and as a shorthand cue for enabling the public to understand the thematic frames of an issue as it unfolds in a dynamic fashion" (p. 144). While #SochiProblems gained popularity throughout the duration of the games, its varied utilization in reference to political issues, socioeconomic implications, and athletic performance decreased the overall impact of the hashtag. Sustained, persistent usage of a hashtag specific to a particular issue could create a more unified message to break news and influence opinions on social media.

Limitations and directions for future research

While this study analyzed traditional and social media content around a sporting event, it should be noted that it was only one specific event. Future research should track the development of newspaper coverage and socially constructed hashtags around multiple sporting events. Another limitation of this study was that the researchers analyzed social media content produced on Twitter. Future research should compare multiple social media platforms to newspapers and other traditional media (i.e. television) coverage. Also, the study focussed on English language newspapers and English language Tweets, a limitation that might have led to a bias in the content analyzed. While the newspaper articles were in English, newspapers from around the globe were represented in the sample (*China Daily*, *Moscow News*, *New Zealand Herald*, *Armen Press*, *The Globe and Mail*, etc.). Future research should examine newspapers and Tweets of multiple languages to perhaps illuminate more nuanced findings. An additional limitation is that while the software used to collect the Tweet data are reliable, the data set utilized in the study is not to be considered complete and if there are Tweets outside of this set that were not captured, these could have potentially provided a different theme in addition to the ones identified within the analysis. Additionally, the study only collected content that included the hashtag #SochiProblems and did not investigate any original material created by copycat accounts (i.e. @Sochiprobliem and @Sochi2014proz) nor by individuals using alternative hashtags. Future research should examine dialogue across multiple hashtags and copycat accounts to determine if similarities or differences exist in terms of the content produced.

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About the authors

Evan Frederick (PhD, Indiana University) is currently an Assistant Professor of Sport Administration at the University of Louisville. His primary research interest is the intersection of sport and social media. Specific areas of interest include fan-athlete interaction on social media platforms as well as organizational communication through social media outlets. Evan Frederick is the corresponding author and can be contacted at: evan.frederick@louisville.edu

Ann Pegoraro (PhD, University of Nebraska) is the Director of the Institute for Sport Marketing (ISM) and holds an appointment as an Associate Professor in School of Sports Administration, all at Laurentian University. Her research primarily focuses on the intersection of sport and new media, particularly social media.

Lauren Burch (PhD, Indiana University) is an Assistant Professor of Management at Indiana University-Purdue University Columbus. Her research interests include media effects in electronic and new media and the relationship between sport organizations, sport media, and sport consumers. Specific areas of research include athlete portrayals on social networking sites such as Twitter and Facebook and the progression of media theories such as framing and agenda setting on social media.