

Full Length Research Paper

Twitter and sports journalism in Germany: Application and networks during the Sochi 2014 Winter Olympics

Christoph G. Grimmer^{1*} and Thomas Horky²

¹Department for Sport Economics, Sport Management and Media Research, University of Tübingen, Germany.

²Media School, Macromedia University of Applied Sciences, Germany.

Received 16 October, 2017; Accepted 19 June, 2018

Professions in the communication realm are affected by Twitter's rapidity, agenda setting, and myriad utilization possibilities. This study addresses potentials of Twitter for journalists in the sport context and assessed journalists' Twitter activity, as well as journalists' Twitter networks and their change in the course of the 2014 Winter Olympics. The sample was composed of the accounts of 30 sports journalists who were accredited officially, and who reported their journalistic profession in their individual Twitter profile. Results indicated a considerably higher usage in the context of a major sports event, journalists favoring personal communication instead of retweeting or replying. Regarding percentages of tweets retweeted or favorited, users rated the journalists' tweets worthwhile above-average. Networks shifted towards the event itself as well as relevant national winter sports federations and athletes.

Key words: Sports journalism, Twitter, social media, networks, Olympic Games.

INTRODUCTION

The advent and popularity of social media has changed many aspects of professional and social life irrevocably. Even the sports system and sports journalism itself are included. One of the main consequences of the social media boom is the associated communication autonomy of sport, as media disappear as an intermediate target group and organizations can communicate as well as sportspeople having their own media channels directly to their reference groups (Burk et al., 2015). New platforms and technological innovations have changed the nature of traditional journalism (Sheffer and Schultz, 2010). In the information-gathering practice, competition is not just between journalists or media, but also with clubs, federations, and athletes who disseminate their news on their corporate websites or digital media channels

(Coombs and Osborne, 2012).

In particular, at major events with large public interest and a high number of reporters, the competitive pressure for (sports) journalists is heightened. On top of that, intermedia competition exists between print, radio, television, and online. According to Boyle (2006, 181), sport "offers a particular challenge for journalists in their need to both inform and entertain in an increasingly fast-paced news environment". Contacts and networks to athletes and sports organizations thus increase in relevance for the journalist's work, with the goal of establishing contact and proximity to the protagonists of the sport as well as possible (exclusively at best), which also applies to the need to obtain information. In addition to the conditions and pronounced competition among

*Corresponding author. E-mail: christophgrimmer@yahoo.de.

journalists at major sporting events, sports journalists face the challenge of optimally fulfilling their journalistic duty and thereby to increasingly make use of technical possibilities (Wigley and Meirick, 2008).

However, professional usage of social media by sports journalists in Germany still appears to be in its beginnings (Horky and Grimmer, 2014). In a recent study, German sport journalists assessed social media mostly as either relevant or extremely relevant for their work. The majority gathers information by following actors from the field of sports (87.5%). Nevertheless, they agreed with the statement that athletes' social media use has made it more and more difficult to provide news exclusively (Nölleke et al., 2017).

The use of Twitter by sports journalists is most of all important at reporting highlights like major sports events. Regarding the auto race, Daytona and Emmons (2013) mentioned, "specifically, journalists' Twitter use during a live sporting event is poised for study as technology and mobility have converged to allow for instant event sharing". In Germany, the 2010 Football World Cup in South Africa was the starting point for social media use of sports journalists (Horky and Grimmer, 2014).

In particular, the Olympic Winter Games can be called a major sports event for sports media all over the world (Markula, 2017), so this should be a good research object for this study. We strive to study this pioneering phase and investigate how Twitter is applied by German sports journalists during a major sports event. This paper analyzes, how accredited and on-site German sports journalists used Twitter in the context of the 2014 Winter Olympics in Sochi, which use Twitter communication served, and how journalists shaped their online networks. With examining their changing way of tweeting, retweeting, favorizing, or following as well as the development of Twitter networks in Sochi we want to demonstrate the importance of Twitter for German sports journalists and in particular the impact of a major sports events on journalistic Twitter usage.

LITERATURE REVIEW

Technological innovations and new platforms are changing the nature of traditional journalism, and information-gathering practices (Gibbs and Haynes, 2013; Sheffer and Schultz, 2010; Wilson and Supa, 2013). Digital technologies have fueled the flow of information. It is rapid, easy, and cheap as never before. The internet and social media, in particular, offer enriched possibilities to break news worldwide, drive traffic on platforms with targeted content, and develop new revenue streams (Coombs and Osborne, 2012).

Sports journalism has in many ways, according to Boyle (2013), "been one of the areas of journalism most profoundly affected by this change". Since more and more people turn to online for informational purposes, the

media sport market is dominated by instant news gathering, reporting, and dissemination. In particular, social media news circulation has picked up the pace (Grimmer, 2017; Hutchins and Rowe, 2010; Kian and Murray, 2014). Social media have accelerated the process of rolling news and make scoops immediately a common good (Boyle and Haynes, 2014; Haynes 2013). Reed (2011) examined in a pilot study the ways of news gathering and the impact of social media on the professionalism of sports journalists by surveying three print media journalists. In particular, Twitter seemed to change the way of working of these sports journalists. Extending her study to seventy-seven print media journalists, Reed (2012) showed with this more detailed analysis that: "Twitter has been accepted as a 'normalized' medium", especially by young professional sports journalists.

In working with Twitter, there are differences between male and female sports journalists which had been demonstrated by Hull (2017) with the case of local broadcasters. Since social media have given athletes, clubs, federations, and events the chance to communicate directly with fans and publics, the influence of social media on the agenda setting progress is crucial in particular for communication professionals (Bowman and Cranmer, 2014; Boyle, 2006, 2012; Burk et al., 2015). Thus, competition in the battle for news is not just between journalists and between media, but nowadays includes sports shareholders and stakeholders that promote information on their respective (personal or corporate) websites or social network sites (Coombs and Osborne, 2012).

Journalists are forced to make accessible new functions and areas of online and social media use (Boyle, 2006). For instance, they use them as a source of news and as a distribution channel for information. Driven by these trends, journalists have less access today than they had decades ago (Suggs, 2015, 2016). Four out of five Chinese sports journalists, for instance, note that social media threaten traditional print media (Li et al., 2017). They reported gathering news as primary motivation for using social media. Only a small percentage of respondents noted a professional simplification based on more news sources and more available information than before the digital era (Li et al., 2017). Monitoring information on social network sites has increased professional pressure.

So far, online sources have not substituted offline sources, they rather serve as supplemental gimmick in the daily news sourcing process (Lecheler and Kruike-meier, 2016). To describe public relations information that are re-warmed by journalists and then conveyed in traditional media, Davies (2009) coined the expression "churnalism". Teams and athletes are more and more regulated by social media guidelines released by federations or clubs (Boyle and Haynes, 2014).

Driven by these trends, journalists have less access today than they had decades ago. While some journalists feel a closer relation with athletes due to private or personal information on social network sites, others acknowledge a more distant relation and social media threatening traditional media (Li et al., 2017). However, it was recently found that social media, which can also provide opportunities that support journalistic practice, are perceived as valuable tools by sports journalists. Indeed, they use social media as a supplement to their proven methods of news gathering and dissemination (Nölleke et al., 2017). The majority of sports journalists in Germany agrees that athletes' social media use has made it more difficult to provide news exclusively, yet 87.5 percent of these journalists gather information by following actors from the field of sports (Nölleke et al., 2017).

English (2016) compared the acceptance of Twitter by sports desks in Australia, India, and the United Kingdom. He combined a content analysis of more than 4100 print and online articles with 36 in-depth interviews. Only 183 print media stories contained some type of Twitter content. Twitter adoption has been most common in the UK sports reporting where 8.0% of all articles included Twitter material. It seemed "evident, that cultural and commercial aspects of the respective nations' media systems impact on rates of adoption" (English, 2016).

India's relatively low adoption is closely linked to the in general lower online and Twitter usage as well as the still existing power of its print industry. Most recently, English (2017) examined gatekeeping influences at individual and organisational levels. He combined in-depth interviews of 22 sports journalists with a content analysis of 2085 Twitter posts from sports journalists covering the Australia - India Test cricket series of 2014 to 2015.

English (2017) stated, that "there are both individual and organisational influences on the sports journalists in their gatekeeping choices and usage of social media". The specific role of Twitter for journalists working in foreign countries has been analyzed by Cozma and Chen (2013). They examined 89 foreign correspondents working for US media and demonstrated, that the correspondents most of all discussed current events in the countries where they were stationed (27%), the tweets focused on events happening elsewhere in the world (19%) and they promoted their own media outlet or disseminated breaking news (each 13%). 77% of the Twitter profiles introduced the correspondents as employees of their news organization. In average, the correspondents sent out 3.2 tweets per day, about 12% of tweets were retweets, about 18% replies to other users. Cozma and Chen (2013) concluded, that the foreign correspondents "used Twitter in a way similar to a wire service", but "many of the correspondents still do not treat Twitter as a professional or promotional tool".

Thus, journalists hesitate to use information retrieved from social media as direct and quoted sources in news

reporting (Lecheler and Kruikeimeier, 2016). Because online sources so far have not substituted offline sources, they rather serve as a supplemental gimmick in the daily news-sourcing process. Journalists still privilege elite sources (Jordaan, 2013; Paulussen and Harder, 2014). However, social media has relevance as inspiration for news stories. This leads to the establishment of partnerships and networks in sports journalism, mainly on Facebook and Twitter (Frederick et al., 2015; Schultz and Sheffer, 2010).

Sportswriters form networks for research and the distribution of topics, mainly due to increasing media competition. The importance of social networks for contact with athletes and sports organizations through using the example of Twitter has been tested several times in the United States (Sheffer and Schultz, 2010). Recently, social network analysis revealed relationships between sports journalists and athletes during certain periods around sporting events and identified clearly perceptible networks (Hambrick, 2012; Hambrick and Sanderson, 2013). Research Gap and Research

Questions

How far sports journalists are adapting to technological changes and applying social media in professional circumstances is important and relatively unexplored either (Li et al., 2017). Internationally renowned sports events guarantee worldwide attention and open up the chance for protagonists to reach large audiences. As a news channel, Twitter is particularly appropriate for communications professions such as public relations practitioners or journalists. Based on these considerations, we derived the following research questions:

RQ 1: Journalists' twitter application – How do sports journalists apply Twitter within the scope of a major sporting event?

RQ 2: Twitter networks – Do Twitter networks of sports journalists and sport representatives develop and how do they change within the scope of a major sporting event?

METHODOLOGY

Aside from the FIFA World Cup, the Olympic Games are the most important international sporting events (Dayan and Katz, 1992). According to official statistics, a total of about 13,000 journalists are meant to have been accredited for the 2014 Olympics in Sochi. That means a ratio of almost five journalists to every individual athlete. With 2,748 athletes from 89 countries in the 2014 Winter Games in Sochi, Russia takes fifth place for the most participants in the winter games (SR/Olympic Sports, 2014; Statista, 2015). The Winter Olympics took place in Sochi/Russia from 7 to 23 February 2014. The German Olympic Sports Confederation 'DOSB' had accredited n=134 sports journalists for the 2014 Winter Olympics in Russia. However, the final sample of this study contained solely

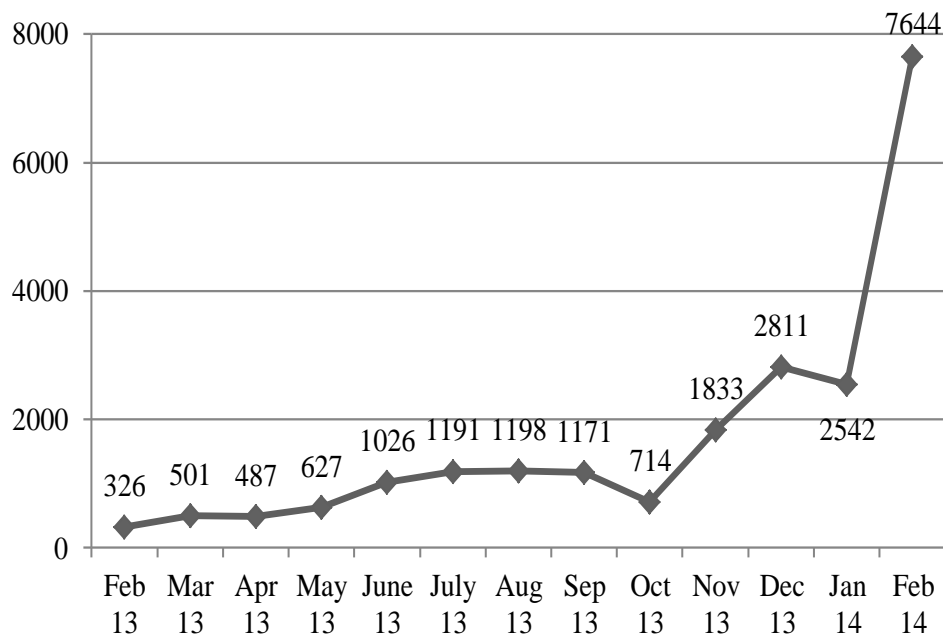


Figure 1. Sports journalists' Twitter activity during the Olympic Games and the pre-Olympic year.

sports journalists' accounts that reported their profession in their Twitter profile (31/23.1%). Because Twitonomy does not give out the data of protected profiles, the sample was limited to $n=30$. We focused on this particular group since these were undoubtedly sports journalists' Twitter profiles that utilized this media outlet consciously and in an official manner. Although this may not reflect the larger population of all sports journalists, it offers insights into the potential and activity of an intentional Twitter usage for professional purposes. A combination of quantitative and qualitative content analysis was applied to address the derived research questions. The examination included one journalists and their Twitter activity, and two journalists' Twitter networks and their change in the course of the event.

Journalists' Twitter application

The analysis tool Twitonomy was applied in the context of the first research question. Buying premium access, necessary specifications were possible for capturing the desired research parameters. Twitonomy offers statistics for variables such as followers, tweets/retweets, mentions, links, answers, hashtags, favorites as well as software used for Twitter communication (iOS, Android etc.) for manually selected accounts. With this data, we can exactly demonstrate the different and changing way of Twitter usage by the sports journalists, the data was analyzed by a content analysis using statistical package for social sciences (SPSS). The period under examination ran from January 28 to February 24 (ten days ahead of the Winter Olympics until one day after the event) to include the sporting pre-coverage and at least the most important day of post-coverage with all final results and closing ceremony. To better understand, classify, and interpret quantitative data in terms of activity, interactivity, and usability during the initial examination period, reference periods were defined and examined to assess comparative values. The first one covers the same time span one year ahead of the Olympics (01/28/13-02/24/13), the second one captures data during the year leading up to the 2014 Winter Games

(01/28/13-01/27/14).

Twitter networks

To assess the meaning of networks within German sports journalism, the 30 selected sports journalist accounts were considered (accounts with unprotected Twitter profile and profession reported in its description). The analysis tool Mentionapp illustrates visually the relational structure for each Twitter account by displaying its relations with other users and/or accounts on the basis of tweets, retweets as well as answers and hashtags. Visualizations were explored with a qualitative content analysis looking for changes within the illustrated networks. Here as well, the examination period comprises a full four-week-period (January 28 to February 24, 2014).

RESULTS

In the following section, the results are presented in relation to both research questions. Consequently, the display of results is structured according to activity, interactivity, usability, connectivity, and effectivity.

Twitter application by sports journalists

In terms of RQ1, it was examined how sports journalists applied Twitter during the Winter Olympics 2014. Additional data aside from this happening is indispensable to classify the event activity adequately. Hence, Figure 1 illustrates the number of tweets in the course of a year, starting in the pre-Olympic year from February 2013 till

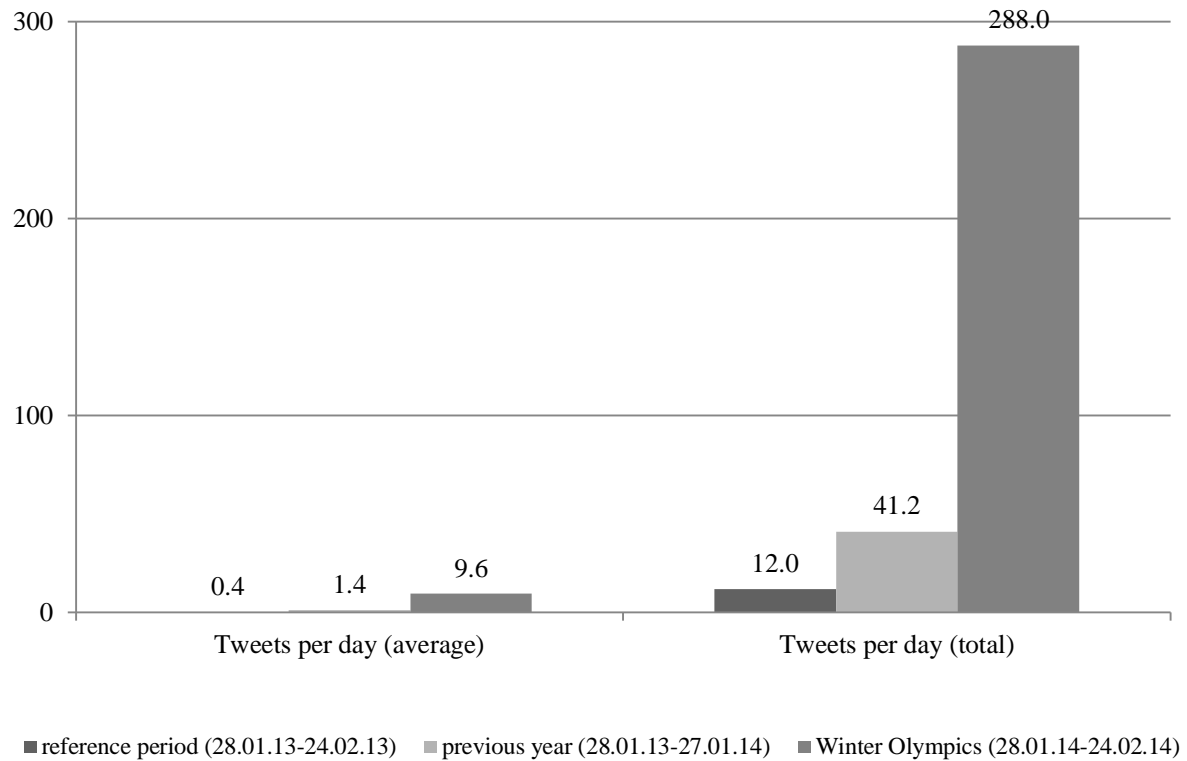


Figure 2. Tweets per day for single accounts and in total differentiated by investigation periods.

February 2014 (time of the Olympic Winter Games).

The figure documents that the Twitter activity of the 30 sampled sports journalists' accounts expanded over the year. While in February 2013, a total of only 326 tweets were transmitted, a total of 7,644 messages were communicated during the Olympic Games in February 2014. Accordingly, activity increased by more than 23 times. During the eleven months in between (from March 2013 to January 2014) about 1,300 tweets per month were sent on average.

Moving away from the historical data, the 30 analyzed profiles sent 8,065 tweets altogether in the period under investigation (01/28/14 to 02/24/14). During the twelve months before the Olympic Games, the number was 15,053, that is not quite twice as many (01/28/13 to 01/27/14), and in the comparison period in 2013 only 335 (01/28/13 to 02/24/13). Therefore, the average for a single journalist was 268.8 tweets during the Games compared with 11.2 in the same period in 2013 or 41.8 tweets per month in the year leading up to the Games. Taking into account the different time spans, two periods of about one month and the twelve months leading up to the Games, the following figure illustrates the activity in tweets per day – on the left arithmetically averaged for a single journalist and on the right aggregated for all 30 profiles (Figure 2).

While each of the journalists sent on average 1.4

tweets per day in the whole year preceding the Winter Olympics, during the Games in 2014 this value was 9.60. Accordingly, sports journalists sent nearly seven times as many tweets per day as in the preceding year and 24 times as many tweets per day as in the same period in 2013. Comparing replies and retweets as two interactive forms of communication; the greater use of replies is immediately striking. This is certainly due to the fact that – as the concept already reveals – replies are answers to tweets. Such conversations can develop certain dynamics and already a few (but controversial) chats can provide corresponding reply values immediately. On average every journalist sent approximately three replies per day in the 2014 Olympics period. In the preceding year ahead of the Winter Olympics replies played virtually no role. The same applies for retweets: In the course of one year, on average only every third sports journalist sent a retweet per day. In the period of the Winter Olympics, this relatively low value was at least six times higher. Thus, each of the 30 sports journalists in the sample transmitted on average 1.7 retweets per day during the Olympics (Figure 3).

For an assessment of the interaction rate, a consideration of the percentage share for tweets, retweets or replies of the messages communicated seems helpful. During the major sporting event, replies played an even more important role than retweets to start a conversation

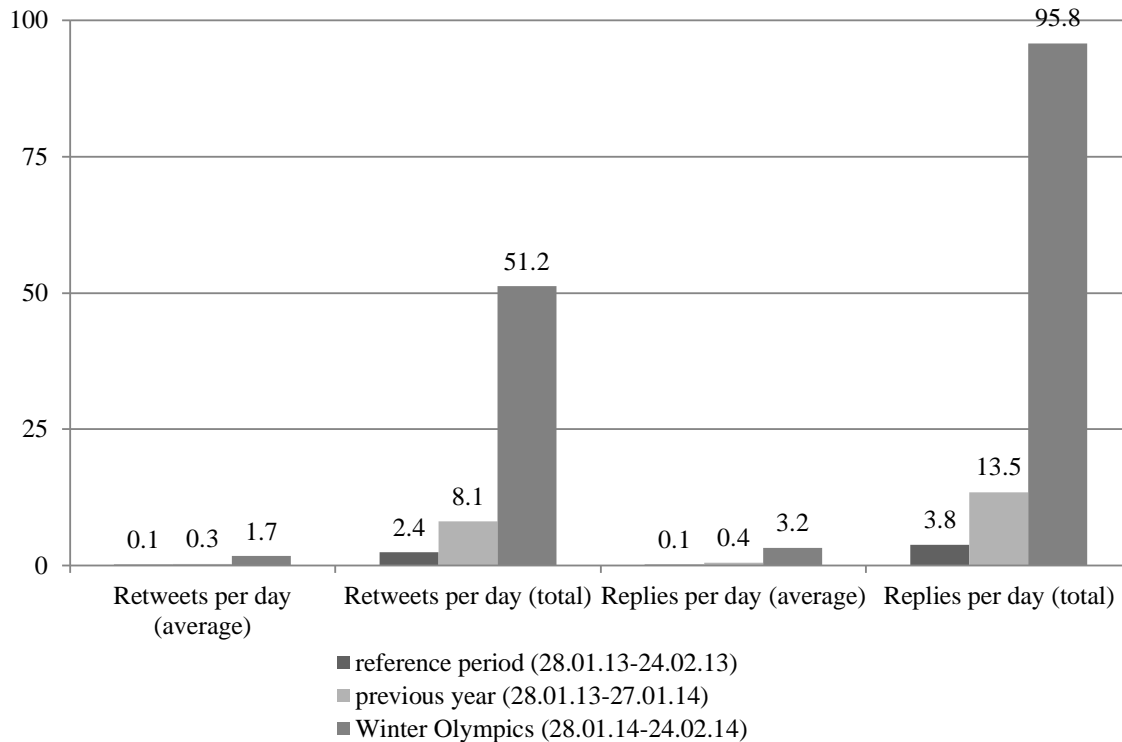


Figure 3. Retweets and replies per day differentiated by investigation period.

or discussion and not just retweet the same content. However, compared to the portion in the preceding year, the percentage of replies during the Winter Olympics shows only a marginal difference of 0.1% points. The discrepancy on the part of retweets is more obvious – the portion decreases from roughly 20% in the course of a year to less than 15% (Figure 4).

Beside retweets and replies, mentions are another indicator for interactivity. The data reveal that this type of communication was used often within the scope of the Winter Olympics. On average, each of the 30 journalists sent about 154 mentions during the major event in Sochi. Within the twelve months ahead of the Olympic Games, on average 295 mentions were integrated in tweets by every media representative. However, looking at the number of mentions per single tweet, marginal differences can be ascertained. Compared to the year ahead of the Games, the value is only 0.01 points higher for Sochi 2014. The small difference is not astonishing in this respect, because the restriction of 140 characters per tweet set by Twitter leaves hardly any elbowroom to insert many mentions in tweets.

Retweets and favoritisms provide information on the extent to which tweets are disseminated and recommended. During the Winter Olympics, 1,756 sports journalists' tweets were retweeted. In the 2013 reference period, retweets numbered just 58, and in the twelve months ahead of the Games 2,589 retweets. The number

of favorites draws a similar picture: In the Olympic period, 3,553 tweets were favored. During the year preceding the Winter Olympics it was 4,579 and in the same period of the previous year, similarly to the retweets, just 58. Because a distortion from the varying activity levels in the different investigation periods is apparent, a consideration of proportions is essential (Figure 5).

The portion of tweets retweeted seems relatively steady compared to the shares for tweets favorited. Between the reference period in 2013 and the preceding year there is hardly any difference. In contrast to these two periods of time, the percentage of tweets retweeted increases by more than four points in the Olympic period. On the other hand, the percentage of tweets favorited has developed constantly over time. After the preceding year value had already reached 30%, almost every second sports journalists' tweet was favorited during the Olympic period in 2014. This result is confirmed by the total number of retweets and favorites. The sports journalists' tweets that had been retweeted received 7,502 retweets altogether. A comparison with the corresponding number of the preceding year stresses the high value: 8,455 retweets in spite of a by far bigger dataset of twelve months. The number of favorites in the investigation period of the 2014 Winter Olympics is nearly on the same level as the number of favorites in the year leading up to the Games (11,656 vs. 12,115). Because of the divergent database (the number of tweets that could

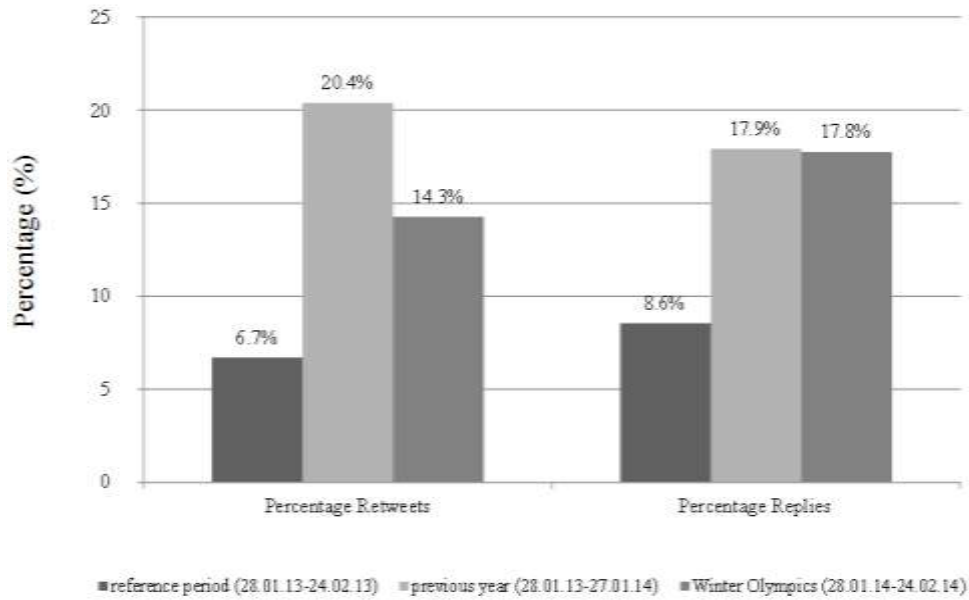


Figure 4. Percentage share for retweets and replies differentiated by investigation periods.

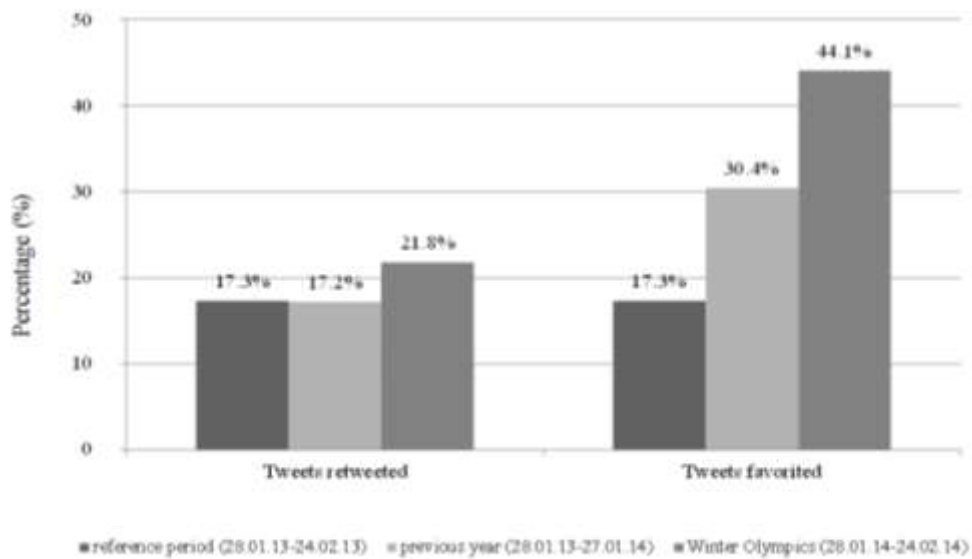


Figure 5. Percentage share tweets retweeted and tweets favorited differentiated by investigation periods.

have been retweeted or favorited), relative values should be emphasized at this point as well (Figure 6).

After having found out that tweets are favorited rather than retweeted, it now turns out that interesting or relevant tweets are more often retweeted than favorited: because the total number of retweets converges on a smaller number of tweets. This insight endures for all three investigation periods. Compared to the course of the preceding year, tweets that were retweeted and/or

favorited receive (almost) one additional retweet and/or favorite during the Olympic Winter Games.

Sports journalists' twitter networks

Twitter networks of the 30 journalists that reported their journalistic profession in their profile description was analyzed qualitatively looking on the accounts they are

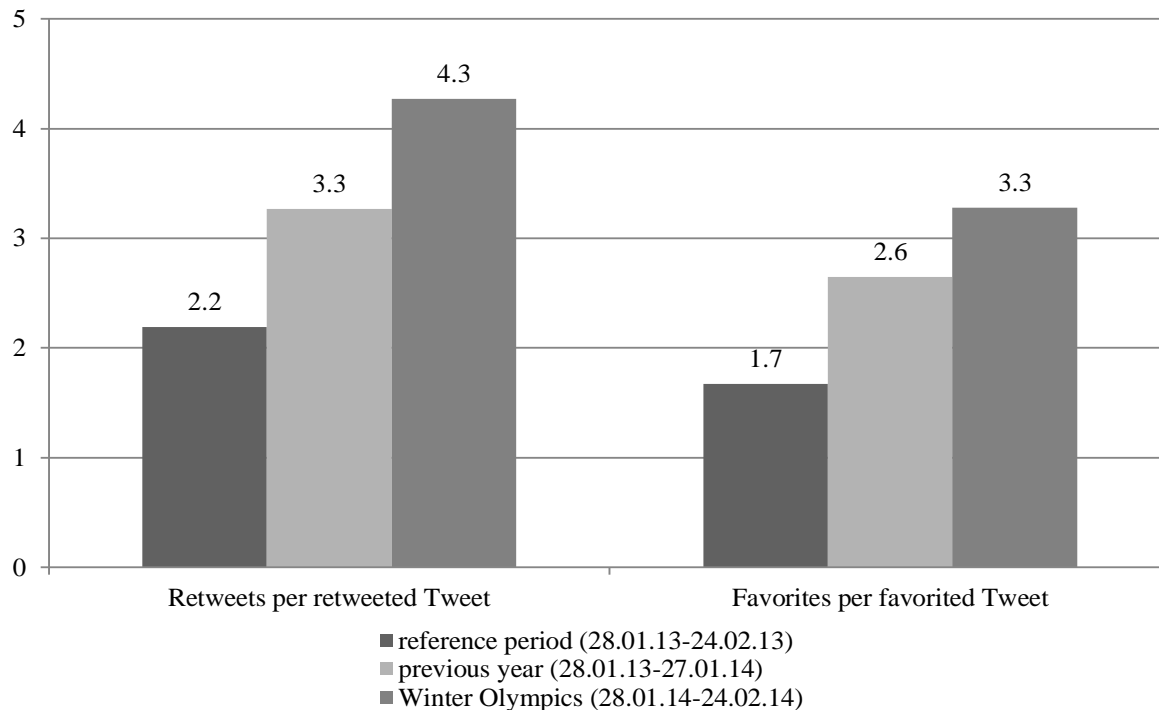


Figure 6. Retweets per retweeted tweet and favorites per favorited tweet differentiated by investigation periods.

strongly connected to and the hashtags used with a specific focus on changes within these networks during the investigation period. Sometimes more, sometimes less – but all in all uniformly recognizable ahead of the Winter Olympics – was an orientation towards the event itself, their own medium, colleagues and several sports celebrities (mostly from their own country).

The network of the journalist Mathias Müller illustrates these relations and connections exemplarily. It appears to be most representative for a common German sports journalist working at the Winter Olympics since Müller showed an ordinary Twitter use in terms of activity and interactivity. This is just one example for Twitter's use of German sports journalists, but should demonstrate a specific way of using Twitter networks. Müller was employed by the regional tabloid paper *tz* Munich in Germany which is distributed in Munich and surrounding regions (Mathias Müller/account: @muellerbloggt). Three days before the opening of the 2014 Winter Olympics connections with regard to several references were verifiable. For instance, strong relations existed with the German Olympic Sports Confederation (@DOSB), the German Skiing Association (@skiverband), the sports editorial department of the German TV station ZDF (@ZDFsport), the journalists Mirko Frank (@Mr_Frankynator) and Mirko Leihkamm (@kopfballer) as well as with the German field-hockey player Nina Hasselmann (@NinaFoxi). Müller posts themes regarding #lisicki (German tennis player Sabine Lisicki), #hotelsochi

(accommodation in the Sochi Olympic city) and #benemayr (German freestyle skier). The relations to hockey and tennis indicate that the network is not at all limited to winter sports. Connections to two colleagues and the national TV station illustrate distinct relations within the journalistic system (Figure 7).

Müller's Twitter network can be further differentiated during the investigation period. On the second survey day just three weeks later, the changes appear to be relatively extensive. Still apparent in the network are the connections to the German Olympic Sports Confederation (@DOSB) as well as the German Skiing Association (@skiverband). Around them a multi-faceted network had evolved with numerous grey boxes which stand for other accounts, primarily comprising journalism/ media and sports profiles. In addition, connections to the German skier Maria Höfl-Riesch (@Maria – concealed behind the grey field @JensHungermann), the German investigative journalist Daniel Drepper (@danieldrepper), the ARD correspondent at that time in Moscow (@InaRuck) as well as the Twitter account of Müller's medium *tz* Munich (@tz_online) had established (Figure 8).

A consideration of the hashtags shows that Müller, along with the German associations, organizations, and athletes, mostly used the German spelling when writing about the venue of the Winter Olympics (#sotschi). The English and international spelling, however, appears stranded at the bottom (#sochi). Other hashtags #gssner and #neureuther stand for the German cross-country

the accredited German sport journalists and with that the impact of social media on their work during major sports events. They publish, interact and commentate at least more than before the Olympic Winter Games. One can draw the conclusion that sports journalists have an above-average gratification and see an increased meaning and usability of tweets in the context of a major sporting event (Katz et al., 1973; Ruggiero, 2000). But it should be noted that tweets retweeted or favorited are not necessarily distinguished, newsworthy, journalistic or even 'objective'. Particularly amusing, linguistically funny, or creative tweets can be recommended.

Shift in online social networks

With regard to the development of online social networks, a light orientation towards the event itself, their own medium, colleagues, and athletes of different sports was detectable via nodes and connections ahead of the Olympics. During the investigation period, adjustments in favor of the event, relevant winter sports associations, the German Olympic Sports Confederation, as well as enhanced interconnections with German winter sports athletes – in particular top athletes and those with medal prospects – became visible. This seems understandable related to enhancing research options for sports journalists during the Olympic Games while interacting with the organizations as well as a way to get their stories noticed by these organizations to raise importance (Nölleke et al., 2017). In comparison, the 'journalistic network' to colleagues or media organizations lost its importance and changed its structure. The results are consistent with existing network analysis and sports journalists' network sociograms offer insights from another stakeholder group in the sports media complex (Hambrick, 2012; Hambrick and Sanderson, 2013; Jhally 1989). Within an increasingly competitive media landscape, networks with athletes and sports organizations are of growing importance (Sheffer and Schultz, 2010). Journalists establish personal networks for research or dissemination of their own work. Finally, the results demonstrate the worth of using Twitter by sports journalists during major sports events to get a higher reach, for strengthen their professional networks and promote themselves.

CONCLUSION

Social media have impacted the shape of existing communication. They disrupt former patterns of journalism, consumption, and practice. It was recently found that social media are perceived as valuable tools by sports journalists. These provide opportunities that support journalists' practice. Indeed, they use social media as a supplement to their proven methods of news

gathering and dissemination (Nölleke et al., 2017). In sports journalism research, social networks were analyzed by today in particular for Facebook and Twitter (Nölleke et al., 2017; Schultz and Sheffer, 2010). Within an increasingly competitive media landscape, networks with athletes and sports organizations are of growing importance for media practitioners (Sheffer and Schultz, 2010)

The purpose of the study at hand was to examine the Twitter use and its relevance for sports journalists in the realm of a major sporting event. Relevant data were assessed with the help of a tripartite content analysis. It focused (1) journalists and their Twitter activity, (2) journalistic topics and their resonance on Twitter, and (3) journalists' Twitter networks and their change during the Olympic event taking place in Sochi/Russia from 7-23 February 2014.

Data concerning sports journalists' Twitter usage attested a strong event-related impact in terms of communication activity. Compared to the share of retweets and replies in the year preceding the Olympic Winter Games, interactivity turned out to be 'relatively' lower. Most likely this can be traced back to a higher share of exclusive information, own opinion, and personal information as well as impressions related to the mega event. Perhaps that is why a higher usability and/or gratification can be ascertained for the journalists' tweets, evident in an increased share of tweets retweeted and favorited as well as more retweets per retweeted tweet and favorites per favorited tweet as usual.

Sports journalists indeed used and enlarged their Twitter network during the Olympic Games. Connections appeared related to the event, the media practitioners' own journalistic medium, and the sports field, while the network with colleagues of other media or media organizations became less important in the course of the event. The prior benefit of Twitter for the accredited sports journalists lies rather in the following sports accounts and the distribution of their own articles and reporting. Social media may affect the creation of news stories, but importance and traction is still conveyed via traditional media. In principle, interaction between journalists and their Twitter audience provides an opportunity to receive greater attention and reach for journalists' media coverage, to develop issues and content cooperatively with users, and, for example, to integrate arguments, thoughts, and views from readers into 'traditional' media coverage (crowdsourcing).

By the evolution of new media, existing media are forced to adjust orientation of content, verbalization, visualization, dramaturgy or related issues and to develop new forms of topic identification, storytelling and content distribution (Grimmer, 2017). In order to further offer additional value for readers, listeners, and viewers, existing media have to change their nature and journalistic practice (Boyle, 2012). Interaction and struggle between old and new media is addressed by the so-called media

life-cycle model (Lehman-Wilzig and Cohen-Avigdor, 2004).

LIMITATIONS

The explorative examination has an investigation period of four weeks and a sample of 30 sports journalists' Twitter accounts. Besides, the major sporting event some of the studied usage parameters such as activity, interactivity, usability, and connectivity appear to be different. In this respect, the presented data are valid only for the comparatively specific context of the 2014 Winter Olympics. In addition, the social and media attention focuses primarily on the event itself and subordinately on the huge number of sporting competitions. The introduced data have shown that Twitter was used more extensively in the investigation period than during the year preceding the event. Additional to the impact of the Olympic event itself, an adaptive effect may have influenced sports journalists' Twitter activity. In the recent past, people have increasingly recognized the potential of Twitter and have acquainted themselves with the use of the medium. Hence, a learning effect may have contributed to a more extensive and more interactive application of the medium. Finally, other external influences on the usage behavior on Twitter of German sports journalists are possible. For instance, the sporting success of athletes or the various sports disciplines covered by an accredited journalist may have had an impact on Twitter use of the sampled reporters.

FUTURE RESEARCH

Overcoming the limitations of the present study could lead to interesting and relevant follow-up research. A content-analytical coding of sports journalists' tweets and in particular communications among themselves seems to be a promising area to describe journalistic networks and more particularized forms of use. A content assessment would also permit a valuation of the quality of Twitter communication. Questioning the self-marketing function, it has to be asked to what extent sports journalists are able to bind existing users to their individual account and/or their own medium, and in addition to what extent other users can be engaged for individual profiles and/or their medium. Do journalists contribute to a more positive image and an improved reputation through their social media engagement? Lastly, international comparative studies on the research subject are valuable. In particular, in the English-speaking language area Twitter has become more mainstream than in Germany and is used more extensively (and presumably more variously). Thus, international examinations comparing social media use by different professional groups, and sports journalists in

particular, promise to make interesting starting points.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

- Bowman ND, Cranmer GA (2014). *SocialMediaSport: The fan as a (mediated) participant in spectator sports*. In *Routledge Handbook of Sport and New Media*. New York: Routledge pp. 213-224.
- Boyle R (2006). *Sports Journalism: Context and Issues*. London: Sage.
- Boyle R (2012). *Social media sport? Journalism, public relations and sport*. In *We Love to Hate Each Other: Mediated Football Fan Culture*. Gothenburg: Nordicom pp. 45-62.
- Boyle R (2013). *Reflections on Communication and Sport: On Journalism and Digital Culture*. *Communication and Sport* 1(1/2):88-99.
- Boyle R, Haynes R (2014). *Sport, public relations and social media*. In *Routledge Handbook of Sport and New Media*. New York: Routledge. pp. 133-142.
- Burk V, Grimmer CG, Pawlowski T (2015). *Same, Same – but Different! On Consumers' Use of Corporate PR Media in Sports*. *Journal of Sport Management* 30(4):353-368.
- Butler B, Zimmerman MH, Hutton S (2013). *Turning the page with newspapers: Influence of the Internet on sports coverage*. In *Routledge Handbook of Sport Communication* London: Routledge pp. 219-227.
- Coombs DS, Osborne A (2012). *Sports Journalists and England's Barclays Premier League: A Case Study Examining Reporters' Takes on Modern Football*. *International Journal of Sport Communication* 5(3):413-425.
- Cozma R, Chen K-J (2013). *WHAT'S IN A TWEET? Foreign correspondents' use of social media*. *Journalism Practice* 7(1):33-46.
- Davies N (2009). *Flat Earth News: An Award-winning Reporter Exposes Falsehood, Distortion and Propaganda in the Global Media*. London: Vintage.
- Dayan D, Katz E (1992). *Media Events. The Live Broadcasting of History*. Cambridge and London: Harvard University Press.
- Emmons B, Butler S (2013). *Institutional constraints and changing routines: Sports journalists tweet the Daytona 500*. *Journal of Sports Media* 8(1):163-187.
- English P (2016). *Twitter's diffusion in sports journalism: Role models, laggards and followers of the social media innovation*. *New Media and Society* 18(3):484-501.
- English P (2017). *Social media boundaries in sports journalism: individual and organisational gatekeeping in India and Australia*. *Asian Journal of Communication* 27(5):480-496.
- Frederick EL, Burch LM, Blaszcza M (2015). *A Shift in Set: Examining the Presence of Agenda Setting on Twitter during the 2012 London Olympics*. *Communication and Sport* 3(3):312-333.
- Gibbs C, Haynes R (2013). *A Phenomenological Investigation into How Twitter has Changed the Nature of Sport Media Relations*. *International Journal of Sport Communication* 6(4):394-408.
- Grimmer CG (2017). *Pressure on Printed Press. How soccer clubs determine journalism in the German Bundesliga*. *Digital Journalism* 5(5):607-635.
- Hambrick ME (2012). *Six Degrees of Information: Using Social Network Analysis to Explore the Spread of Information Within Sport Social Networks*. *International Journal of Sport Communication* 5(1):16-34.
- Hambrick ME, Sanderson J (2013). *Gaining Primacy in the Digital Network: Using Social Network Analysis to Examine Sports Journalists' Coverage of the Penn State Football Scandal via Twitter*. *Journal of Sports Media* 8(1):1-18.
- Haynes R (2013). *Sports Journalists, Social Networks, and Strategic Communications Management in the UK*. In *Crossmediale Kommunikation und Verwertung von Sportveranstaltungen*. Aachen: Meyer & Meyer pp. 46-58.

- Horky T, Grimmer CG (2014). The FIFA World Cup 2010 in the German Media: Presentation and Construction of a Large Sports Event. In African Football, Identity Politics and Global Media Narratives. The Legacy of the FIFA 2010 World Cup. Basingstoke: Palgrave Macmillan pp. 207-230.
- Hull K (2017). An Examination of Women's Sports Coverage on the Twitter Accounts of Local Television Sports Broadcasters. *Communication.Sport* 5(4):471-491.
- Hutchins B, Rowe D (2010). Reconfiguring Media Sport for the Online World: An Inquiry Into 'Sports News and Digital Media'. *International Journal of Communication* 3(4):696-718.
- Jhally S (1989). Cultural studies and the sports/media complex. In: L.A. Wenner (Ed.), *Media, Sports, & Society*. London: Sage pp. 70-97.
- Jordaan M (2013). Poke me, I'm a Journalist: The Impact of Facebook and Twitter on Newsroom Routines and Cultures at two South African Weeklies. *Ecquid Novi: African Journalism Studies* 34(1):21-35.
- Katz E, Blumler JG, Gurevitch M (1973). Uses and Gratifications Research. *The Public Opinion Quarterly* 37(4):509-523.
- Kian EM, Murray R (2014). Curmudgeons but Yet Adapters: Impact of Web 2.0 and Twitter on Newspaper Sports Journalists' Jobs, Responsibilities, and Routines. *#ISOJ Journal* 4(1):61-77.
- Lecheler S, Kruikemeier S (2016). Re-evaluating journalistic routines in a digital age: A review of research on the use of online sources. *New Media Society* 18(1):156-171.
- Lehman-Wilzig S, Cohen-Avigdor N (2004). The natural life cycle of new media evolution. Inter-media struggle for survival in the internet age. *New Media and Society* 6(6):707-730.
- Li B, Stokowski S, Dittmore SW, Scott OKM (2017). For Better or for Worse: The Impact of Social Media on Chinese Sports Journalists. *Communication & Sport* 5(3):311-330.
- Markula P (2017). Twenty-two Olympic Winters: the media and the (non-)making of the Games. In: L.A. Wenner, A.C. Billings (Eds.), *Sport, Media, and Mega-Events*. London/New York: Routledge pp. 69-84.
- Nölleke D, Grimmer CG, Horky T (2017). News Sources and Follow-up Communication. Facets of Complementarity between Sports Journalism and Social Media. *Journalism Practice* 11(4):509-526.
- Paulussen S, Harder RA (2014). Social Media References in Newspapers: Facebook, Twitter and YouTube as Sources in Newspaper Journalism. *Journalism Practice* 8(5):542-551.
- Reed S (2011). Sports journalists' use of social media and its effects on professionalism. *Journal of Sports Media* 6(2):43-64.
- Reed S (2013). American sports writer's social media use and its influence on professionalism. *Journalism Practice* 7(5):555-571.
- Ruggiero TE (2000). Uses and gratifications theory in the 21st century. *Mass Communication and Society* 3(1):3-37.
- Schultz B, Sheffer ML (2010). An Exploratory Study of How Twitter Is Affecting Sports Journalism. *International Journal of Sport Communication* 3(2):226-239.
- Sheffer ML, Schultz B (2010). Paradigm shift or passing fad? Twitter and Sports Journalism. *International Journal of Sport Communication* 3(4):472-484.
- SR/Olympic Sports (2014, July 13). 2014 Sochi Winter Games. Retrieved from <http://www.sports-reference.com/olympics/winter/2014/>
- Statista (2015, July 13). Entwicklung der Anzahl der Teilnehmer bei Olympischen Winterspielen von 1924 bis 2014. Retrieved from <http://de.statista.com/statistik/daten/studie/75505/umfrage/anzahl-der-teilnehmer-der-olympischen-winterspiele-seit-dem-jahr-1924/>
- Suggs DW (2015). Valuing the Media: Access and Autonomy as Functions of Legitimacy for Journalists. *International Journal of Sport Communication* 8(1):46-67.
- Suggs W (2016). Tensions in the Press Box: Understanding Relationships Among Sports Media and Source Organizations. *Communication.Sport* 4(3):261-281.
- Wigley S, Meirick PC (2008). Interactive Media and Sports Journalists: The Impact of Interactive Media on Sports Journalists. *Journal of Sports Media* 3(1):1-25.
- Wilson D, Supa DW (2013). Examining Modern Media Relations: An Exploratory Study of the Effect of Twitter on the Public Relations-Journalist Relationship. *Public Relations Journal* 7(3):1-20.