How Twitter is used to set a youth mental health agenda

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ABSTRACT: *Drawing on agenda-setting theory, this study examines the effects of organisational Twitter accounts on public discourse in the Twittersphere. The tweets that mention one of three youth mental health organisations were theorised to emanate the particular focus of the organisation mentioned. This was investigated by analysing 600 randomly selected tweets that mentioned one of three national mental health organisations – ReachOut, headspace, or the Young and Well Cooperative Research Centre. Findings supported anticipated patterns, whereby the tweets reflected the remit of the three organisations. These findings reveal the influential role of social media in setting a youth mental health agenda. The implications for practitioners and researchers are discussed.*

Keywords: Healthcare marketing and promotion; knowledge translation; managing mental health services

Managing for peak performance is conventionally associated with demonstrated impact. In the context of health services (*sensu lato*), this includes effect on consumer and community wellbeing (Batalden, Nelson, Edwards, Godfrey, & Mohr, 2003; Gillies, Chenok, Shortell, Pawlson, & Wimbush, 2006). As Juzwishin (2010) has noted, 'At peak performance the health care system is universally accessible, clinically effective, cost effective, safe, efficient, patient centered, integrated, coordinated and population health oriented' (p. 606).

To affect wellbeing, health services must help consumers (and potential consumers) to become aware of, and engage with their services. As per the Australian health literacy statement, being health literate requires (among other elements) the knowledge to 'access, understand, appraise and apply information to make effective decisions about health and health care and take appropriate action' (Australian Commission on Safety and Quality in Health Care, 2014, p. 1). Yet this can be a challenge for services that work with and support consumers who experience conditions associated with stigma – like mental health issues. This was demonstrated in a recent systematic review, which found mental health-related stigma has 'a small- to moderate-sized negative effect on help-seeking' (Clement et al., 2014, p. 1).

Although many Australian and New Zealander adults experience poor mental health (ABS, 2008; Ministry of Health, 2013), the situation for their younger counterparts is worse. Approximately one in four young Australians, aged 16 to 24 years (inclusive), experience mental illness (AIHW, 2011), while across the Tasman Sea, an estimated 29 percent of young New Zealanders within this age

bracket experience mental illness (Mental Health Commission, 2011). Furthermore, these prevalence rates do not correspond with the rates at which mental health services are accessed. In Australia and New Zealand, less than a quarter of young people with mental illness are reported to access a mental health service (23% and 22.5%, respectively; ABS, 2010; Ministry of Health, 2014). This gulf between prevalence rates and service-use rates begs the question, how might the profile of youth mental health be raised and situated on the public agenda?

Communication researchers, particularly in the realm of mass communication – have long considered similar challenges, attempting to empirically clarify the ways in which discourse influences cognition, affect, and behaviour (Griffin, Ledbetter, & Sparks, 2014; McCroskey & Richmond, 1996; McQuail, 2010). Consider for instance, agenda-setting theory, which suggests the public agenda is shaped by the agenda that holds prominence within mass media (McCombs & Shaw, 1972). Since McCombs and Shaw's seminal study on political campaigning, agenda-setting theory has been used to elucidate the relationship between mass media and public sentiment on cultural goods, immigration, health issues, and fundraising for relief efforts, among other topics (Bantimaroudis & Zyglidopoulos, 2014; Dunaway, Branton, & Abrajano, 2010; Durrant, Wakefield, McLeod, Clegg-Smith, & Chapman, 2003; Redman, Spencer, & Sanson-Fisher, 1990; Waters, 2013). Yet, to the authors' knowledge, it is yet to be applied to the topic of youth mental health.

Drawing on agenda-setting theory, this paper examines the role of mass media in promoting a youth mental health agenda. Building on previous work [references omitted for blind peer review], this was achieved by analysing randomly selected tweets that mentioned one of three Australian, not-for-profit mental health organisations – namely, ReachOut, headspace, or the Young and Well Cooperative Research Centre (YAWCRC). These mentions were analysed to determine how the remit of each organisation shapes public discourse in the Twittersphere.

For five key reasons, Twitter represents an appropriate medium for this study. First, it is versatile, allowing users to communicate their micro-blogs via text and/or images (Cooper, 2013; Oremus, 2013). Furthermore, as a marker of 'addressivity' (Honeycutt & Herring, 2009), users can use the '@' symbol followed by a Twitter handle – known as a 'mention' – to reply to, or simply mention other Twitter users within a tweet. Commencing a tweet with a mention serves to personally address

or reply to a fellow user, while embedding a mention within the body of a tweet draws the attention of the mentioned user, and raises their profile (boyd, Golder, & Lotan, 2010; Bruns & Stieglitz, 2013). Versatility is also demonstrated by the ways in which Twitter can be used – exchanges within the Twittersphere can be one-to-one, one-to-many, as well as one-to-one with the potential for public visibility (Weller, Bruns, Burgess, Mahrt, & Puschmann, 2013). The second reason that Twitter represents an appropriate medium is its growing use, with over 645.7 million Twitter accounts worldwide, 2.79 million of which are within the Australian Twittersphere (Bruns, 2014; Statistic Brain Research Institute, 2015). Third (and perhaps relatedly), ReachOut, headspace, and YAWCRC actively use this medium to further their causes, issuing an average of 4.95, 3.24, and 5.97 tweets per day, respectively, and collectively attracting 57,161 followers (see Table 1). Fourth, tweets that are in the public domain are searchable and quantifiable, allowing for trends to be detected over time (Vargo, Basilaia, & Shaw, 2015). Finally, tweets have been found to correlate with public sentiment (O'Connor, Balasubramanyan, Routledge, & Smith, 2010). Together, these reasons lend Twitter as an appropriate medium for this study.

INSERT TABLE 1

Before presenting the study, this paper commences with an overview of agenda-setting theory. ReachOut, headspace, and YAWCRC are then briefly described, elucidating what they do and how they do it. Following the presentation of the study, the paper concludes by summarising the key findings, as well as highlighting the associated implications for practitioners and researchers.

AGENDA-SETTING THEORY

Conceived by McCombs and Shaw (1972), agenda-setting theory reminds us that the media shapes publics' perceptions. By increasing the prominence of particular issues at particular times, the media can lure individuals into assuming these issues are important and warrant attention (McCombs, 2004). This was indicated when McCombs and Shaw measured the media agenda during the 1968 presidential campaign in the United States. By examining the position and length of election-related stories, they found a correlation between 'what... voters said were key issues of the campaign with the actual content of the mass media used by them during the campaign' (p. 177). Although they acknowledged the limits of this correlational study, they argued that the agenda-setting function of the

media affects the observed relationship between the media agenda and the public agenda (Adams, Harf, & Ford, 2014).

Agenda-setting theory works at three fundamental levels. First, 'The media tell us... what to think about' – the agenda set by the media primes their publics by transferring the salience of items on their agenda to the publics' agenda (Griffin et al., 2014, pp. A-5). Second, 'The media tell us... how to think about', or frame the event and/or topics (Griffin et al., 2014, p. A-5). To learn from their experiences, individuals process the event and/or topics, transferring 'the salience of selected attributes to prominence among the pictures in our heads'. Third, the media can 'influence an integrated picture of these attributes' (McCombs & Guo, 2014, p. 265). Following contemporary research, the network agenda-setting model demonstrates the intricate and interconnected ways in which understandings of an event and/or topics are formed and how these understandings evolve.

Although individuals are not assumed to be mere vacuums awaiting media content, some are more attentive and susceptible to this content – notably, those with a need for orientation (Matthes, 2005; Weaver, 1980). The need for orientation is defined by two lower-order concepts – namely, and in order of priority, relevance and uncertainty (Matthes, 2008; McCombs, 2004; McCombs & Guo, 2014). More specifically, individuals seek out and/or orientate themselves towards content they consider to be germane, either at a personal level or a social level (Bulkow, Urban, & Schweiger, 2013). As such, the greater the perceived relevance of the content, the greater the need for orientation. This is particularly the case when an individual is yet to form an opinion on this content and as such, requires information to form a view. It then follows that the greater the uncertainty, the greater the need for orientation.

The need for orientation is also partly determined by the degree to which an issue obtrudes into an individual's personal experience (Walgrave & Van Aelst, 2006; Weaver, 1980; Zucker, 1978). According to McCombs (2004), obtrusive issues that individuals are likely to experience – personally or at arm's length – do not engender a need for orientation, because personal experience enables them to form an opinion. Examples may include taxes, education, and healthcare. Conversely, individuals are likely to require, and orientate themselves towards content on unobtrusive issues, which they are unlikely to experience, personally or at arm's length. As such, limited experience with an issue is

likely to impel an individual to seek guidance from the media to 'reduce their uncertainty' (p. 62). Examples may include 'government credibility, foreign affairs, the environment and energy, and race relations' (Kim, 2014, p. 67) – and potentially, youth mental health issues.

Since McCombs and Shaw (1972) introduced agenda-setting theory, the world has changed. The evolution of technology has enabled those who do not represent traditional forms of news media – be they organisations or individuals – to '[by]pass... the gatekeepers of the news media' (Esrock & Leichty, 1998, p. 309) and engage directly with their publics, *en masse* and often (Brake, 2014; Bruns & Highfield, 2012; Korson, 2015; Wall, 2015). Reflecting these (and perhaps other) changes (Antonio, 2015; Ritzer, Dean, & Jurgenson, 2012), agenda-setting theory has been used to elucidate the ways in which these other voices use online technologies to shape the public agenda. For instance, Esrock and Leichty examined how large, *Fortune 500*-listed corporations used their websites to present themselves as socially responsible, while more recently, Fernando and colleagues (2014) considered how not-for-profit agencies used their websites to contribute to public sentiment on 'greenwashing'. Although traditional forms of news media still exert considerable influence on the public agenda (Shehata & Strömbäck, 2013, p. 250), they now compete with a myriad of different voices.

From this review of agenda-setting theory, two key points are apparent. First, despite the evolution of social media (Aghaei, Nematbakhsh, & Farsani, 2012), there is limited research on how those who do not represent traditional forms of news media use web 2.0 technologies to shape the public agenda. Second, agenda-setting theory is yet to be used to understand public sentiment on youth mental health. For these reasons, and as part of a 'centrifugal trend' (McCombs, 2004), this paper extends the sphere of agenda-setting theory by examining the role of Twitter – a form of mass media and social media – in promoting a youth mental health agenda. Following the aforesaid review of the theory, the three mental health organisations of interest are briefly described.

YOUTH MENTAL HEALTH ORGANISATIONS

To address the prevalence of and implications associated with youth mental health issues in Australia, three not-for-profit organisations were launched over a 13-year period (see Figure 1). The first was ReachOut in 1998. Said to be 'The world's 1st online mental health service' (Inspire Foundation, 2014, p. 4), ReachOut aims to 'improve the mental health and wellbeing of young

Australians [aged 16 to 25 years] by *enhancing mental health literacy*, *increasing resilience*, and *facilitating help-seeking*' (Burns, Morey, Lagelée, Mackenzie, & Nicholas, 2007, p. S31, emphasis added). It is particularly focused on helping young people 'to get through tough times' (Inspire Foundation, 2014, p. 2). Towards this aim, the organisation offers access to a range of free online applications that: provide 'daily tips'; monitor wellbeing; enable young people to 'set goals and maximise... strengths'; and boost wellbeing (Reachout.com, nd-b). Consider for instance, the opportunity to request daily short message service (SMS) messages on a selected theme, including 'Tips for being self-aware', 'Change and acceptance', and 'Random acts of kindness' (Reachout.com, nd-a). Similarly, The Sorter is an application to guide young people through various challenges they might experience.

<div align="center">INSERT FIGURE 1</div>

The second organisation – headspace – was established in 2006 as the National Youth Mental Health Foundation. Funded by the federal government, the organisation aims to 'improve young people's mental, social and emotional wellbeing through the *provision of high quality, integrated services* when and where they are needed' (headspace, 2012, p. 6, emphasis added). At time of writing, there were 107 headspace centres operating throughout Australia or pending. This allows the organisation to 'help young people who are going through a tough time' (headspace, 2015, para. 1) via 'direct clinical services' (headspace, nd, p. 1). Designed to be youth-friendly, the centres deliver mental healthcare, primary healthcare, drug and alcohol services, as well as vocational guidance. In addition to these centres, headspace offers eheadspace – 'a national online and telephone support service... for young people [and/or their concerned families and friends] who aren't able to access a headspace centre or would prefer to get help... via online chat, email or phone'; the headspace Youth Early Psychosis Program (hYEPP), which offers 'specialist support to young people experiencing, or at risk of developing, their first episode of psychosis, and their families'; and headspace School Support, which 'works with school communities on a daily basis to prepare for, respond to and recover from the suicide of a student' (headspace, nd, p. 5).

Although YAWCRC joined Twitter in late 2010, it opened its office to the public in 2011 with the expressed aim to '*explore* the role of technology in young people's lives, and to *determine* how

those technologies can be used to improve the mental health and wellbeing of those aged 12 to 25' (YAWCRC, 2012, para. 4, emphasis added). Involving a network of over 75 organisations from the academic, government, not-for-profit, and corporate sectors (YAWCRC, 2013b), these organisations conduct internationally-recognised research; develop evidence-based tools, applications, and resources; and translate research into policy and practice (YAWCRC, 2013a). Its focus on research permeates the organisation's strategic plan. Consider for instance, its four pillars of success. While the latter two recognise the importance of *youth participation* and *end-user engagement*, the first is *scientific rigour*, whereby the organisation 'aims to uphold standards of scientific excellence [and]... make a contribution to the generation of new evidence' (para. 16). Furthermore, the second pillar is the *innovative use of technologies*, which affirms organisational commitment to '*exploring* and *understanding* the role of new and emerging technologies in the lives of young people' (para. 17, emphasis added).

The aforesaid descriptions of ReachOut, headspace, and YAWCRC reveal that, although they collectively aim to promote youth mental health, they each pursue this aim in nuanced ways. While ReachOut primarily offers online practical assistance and affirmation, headspace chiefly delivers direct mental health services, and YAWCRC appears to be largely focused on exploratory efforts to determine what works in online youth mental healthcare. Following this overview, this study examines the effects of organisational Twitter accounts on public discourse in the Twittersphere.

METHODS

Over a period of 165 days, or 5.42 months (August 11, 2014 to January 23, 2015, inclusive), all tweets that mentioned ReachOut, headspace, or YAWCRC were extracted. This was aided by the social media data aggregator, Twitonomy (Enriquez-Gibson, 2014). Twitonomy is an internet-based, analytics program that enables Twitter accounts and the accounts connected to them to be examined over time. It collates account information – for instance, the date the account was registered, the number of followers, and so forth; it delves into, and extracts archival tweets that are accessible; it computes detailed statistics on account traffic, connections, and trends; and it presents visual depictions of the results. The parameters of this program are such that the total number of tweets that can be extracted from a single Twitter account at any one time is limited – more specifically, of the

last tweets issued from an account, approximately 3,200 tweets can be extracted. As such, the analytics available via Twitonomy are limited to the tweets that are extracted.

During the period of data collection, 14,698 tweets were extracted (over time) that mentioned at least one of the three organisations; the highest proportion of these mentioned headspace (44.8%, see Table 2). Guided by previous research [references omitted for blind peer review], 200 tweets were randomly selected that mentioned each of the three organisations (*n*=600). To ensure the voices of the three organisations did not dominate the analysis (directly or indirectly), the dataset was devoid of: (1) self-mentions – as such, no tweet was authored by the organisation mentioned; as well as (2) retweets and modified tweets – this helped to ensure the analysis of original (rather than plagiarised) tweets.

INSERT TABLE 2

To strengthen the veracity of the findings, two coders independently coded the dataset to determine tweet content. More specifically, they discretely categorised each tweet as positive, negative, or irrelevant (see Table 3). Guided by the concept, mental health literacy, which encompasses the 'knowledge and beliefs about mental disorders which aid their recognition, management or prevention' (Jorm et al., 1997, p. 182), positive tweets were those that: recognised the efforts of the mentioned organisation; contained practical advice, a hopeful message, information related to mental health – be it about mental healthcare, research, and/or services; and/or referred to favourable self-change. Negative tweets were those that referenced disappointments, complaints, or detrimental self-change, while irrelevant tweets were those that were beyond the direct focus of this study. The coders compared their selections, and discrepancies were discussed and reconciled.

INSERT TABLE 3

RESULTS

Most mentions were deemed to contain positive content, with headspace attracting the largest proportion of positive mentions (90.5%; see Table 2). Of the remaining mentions, relatively few were deemed irrelevant or negative, with ReachOut attracting the largest proportion of negative mentions (3.0%):

> @peterhogan15 @ReachOut_AUS well first address why parents
>
> don't understand or care?

Given the low number of negative mentions, no further analysis of these was conducted.

Most mentions of ReachOut were endorsements, acknowledging its efforts to promote youth mental health (27.5%):

> thank   you   @ReachOut_AUS   for   this   important   message
> au.reachout.com/grieving-for-a…

As an organisation that offers direct services to young people, most mentions of headspace alluded to, and raised the profile of mental health services (33.5%):

> Once again, if people are mean on the internet and you need to talk
> about   it,   helps   out   there   @headspace_aus   @beyondblue
> @LifelineAust peace

Similarly, and in accordance with its remit, most mentions of YAWCRC made reference to mental health research (32%):

> @SPC_Adelaide enjoy sharing outstanding research: How can
> technology help wellbeing for young men? @yawcrc article:
> ow.ly/Dmzlq

When possible, chi-square tests were performed to determine whether tweet content was determined by the organisation mentioned within the tweet. Results were significant for all codes analysed, except for endorsement (see Table 4). This suggests that, regardless of their remit, none of the three organisations were more (or less) inclined to be explicitly endorsed by a fellow Twitter user:

> Help for 80,000 Young Australians thank [*sic*] to @headspace_aus
> buff.ly/1tqaI2v

INSERT TABLE 4

Tweets that contained helpful strategies were significantly, yet weakly associated with the mentioned organisation. Furthermore, these tweets were more inclined to mention ReachOut (11.5%), relative to headspace (6.5%) or YAWCRC (4.5%):

> Ask the question that can make a difference – Are you ok? I'll be
> asking EVERYONE. @beyondblue @ReachOut_AUS @ruokday
> #RUOKday #ruok

Similarly, tweets that emanated hopefulness were significantly, yet moderately associated with the organisation mentioned (Cramer's V=0.32). While YAWCRC was not mentioned within these hopeful tweets, ReachOut attracted the most mentions in these encouraging messages (17.5%):

> Ask the question that can make a difference – Are you ok? I'll be
>
> asking EVERYONE. @beyondblue @ReachOut_AUS @ruokday
>
> #RUOKday #ruok

Tweets that spoke of mental health issues or wellbeing were significantly, yet weakly associated with the organisation mentioned (Cramer's V=0.10). And it appears that headspace attracted more mentions within these tweets (21%), compared with ReachOut (12%) and YAWCRC (17%):

> Putting #mentalillness into perspective & why it needs funding
>
> @headspace_aus   @SuicidePrevAU   @LifelineAust
>
> #zipitozcouriermail.com.au/news/opinion/o…

The strongest association was found between tweets that noted mental health research and the organisation mentioned (Cramer's V=0.44). Corresponding with its primary sphere of activity, YAWCRC attracted more mentions within these tweets (32%), relative to ReachOut (2.5%) and headspace (1.0%):

> Children ditching TV in favour of the iPad: One in 5 under 15s now
>
> use their OWN tablet to watch shows @yawcrc ln.is/dailym.ai/3o4yS

Tweets containing information on mental health services were significantly associated with the organisation mentioned ($p<0.05$). Consistent with its national responsibility, headspace attracted the most mentions within these tweets (33.5%), compared with ReachOut (13.0%) and YAWCRC (7.5%):

> FYI: Here's some people you can call if you need to talk. #RUOKday
>
> @LifelineAust @kidshelp @headspace_aus http://t.co/xz9kMaETYN

DISCUSSION

As a measure of peak performance, health services (*sensu lato*) are expected to demonstrate their impact on consumer and community wellbeing (Batalden et al., 2003; Gillies et al., 2006;

Juzwishin, 2010). Yet, this can be difficult when issues like stigma thwart consumer access to these services – as is the case with mental health issues (Clement et al., 2014).

The mental health of many young people is far from ideal (AIHW, 2011; Mental Health Commission, 2011). Moreover, current prevalence rates are not consistent with the rates at which they access mental health services (ABS, 2010; Ministry of Health, 2014). This chasm and the associated implications have spurred initiatives to support young people. In Australia, these include ReachOut, headspace, and YAWCRC, all of which aim to promote youth wellbeing, actively engaging with young people and the practitioners who work with them (Burns et al., 2007; Rickwood, Telford, Parker, Tanti, & McGorry, 2014; YAWCRC, 2012). This is suggested by their use of social media, like Twitter. Yet despite these similarities, the organisations each pursue their aim in distinct ways, with ReachOut primarily offering online practical assistance and affirmation; headspace chiefly delivering direct mental health services; and YAWCRC awarding primacy to research.

To determine how the profile of youth mental health might be raised and situated on the public agenda, this paper drew on agenda-setting theory (McCombs & Shaw, 1972) to examine the role of Twitter – as a form of mass media and social media – in promoting a youth mental health agenda. Agenda-setting theory posits a close connection between media and public opinion (Griffin et al., 2014; McCombs, 2004). Accordingly, the content of 600 randomly selected tweets that mentioned ReachOut, headspace, or YAWCRC was examined.

The findings suggest the tweets that mentioned ReachOut offered significantly greater practical advice and hope; those that mentioned headspace were significantly more likely to demonstrate an awareness of mental health issues or wellbeing; and those that mentioned YAWCRC were significantly more inclined to reference research relevant to mental health. These findings reflect the respective foci of each organisation. Given the dataset was devoid of tweets that were authored by the organisations, the findings empirically demonstrate how an organisational remit influences discourse in the Twittersphere, and thus, how Twitter can be used to set a youth mental health agenda.

Despite the seeming ubiquity of social media, there are no naïve claims of its power. After all, even 'well-executed health mass media campaigns... [only] have small-to-moderate effects... on health knowledge, beliefs... attitudes... [and] behaviors... [and] only... if principles of effective campaign

design are carefully followed' (Noar, 2006, p. 21). Notwithstanding this caveat, this research reveals how those who do not represent traditional forms of news media can use web 2.0 technologies to influence 'which objects are even on the agenda... [and remain] "top of mind"' (Carroll & McCombs, 2003, p. 39).

Despite the value of the findings from this study, three limitations warrant mention. First, given the dynamic nature of social media platforms, like Twitter, the cross-sectional design of this research suggests the findings have a time life-span. Second, despite the analysis of randomly selected tweets, the tweets may not be representative of those that mention the three organisations, or tweets that mention other organisations that assume similar roles. Third, given the nature of the Twittersphere, the authors of the tweets could not be verified – for instance, it is possible that some of the tweets were issued by individuals or agencies that represent 'manufactured... front groups' (Gosden & Beder, 2001, p. 1).

Conclusion

Notwithstanding the aforesaid limitations, the findings from this study have theoretical, practical, and research implications. More specifically, the findings suggest that agenda-setting theory (McCombs, 2004) may now be transforming into an agenda-*trending* theory (Groshek & Groshek, 2013). In addition to traditional forms of news media, mass media encompasses organisations – like those included in this study – that engage directly with their publics, *en masse* and often (Brake, 2014; Bruns & Highfield, 2012; Korson, 2015; Wall, 2015). For practitioners, the key lesson is that social media, like Twitter, can be used to situate their agenda within public discourse. Furthermore, through a concerted effort, organisations that share a similar aim can use social media to work towards 'intra-media agenda setting... Overlapping [and reinforcing their respective] agendas' (Yuan, 2011, p. 1001). For scholars of health service management, this study provides a platform for future research. This includes research to: (1) examine the need for orientation among those who mention a mental health organisation (Matthes, 2005; Weaver, 1980); and (2) determine whether and how agenda-setting contributes to demonstrable evidence of consumer and/or community wellbeing over time.

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TABLES & FIGURES

Tables

Table 1: Twitter Activity of ReachOut, headspace, and YAWCRC

	ReachOut	**headspace**	**YAWCRC**
Joined Twitter	June 29, 2009	March 11, 2008	December 13, 2010
Tweets	9,036	9,872	9,961
Following	3,263	4,655	1,128
Followers	15,706	32,516	8,939
Followers / following	4.81	6.99	7.92
Analysed tweets	3,184	3,184	3,193
Analysed from	September 3, 2013	September 27, 2012	December 20, 2013
Analysed to	June 7, 2015	June 7, 2015	June 7, 2015
Tweets / day	4.95	3.24	5.97
% of tweets being retweets	19.35	23.05	15.60
User mentions	1,123	2,143	3,419
Mentions / tweet	0.35	0.67	1.07
Replies	293	560	658
% of tweets being replies	9.20	17.59	20.61
Tweets retweeted	1,646	1,864	1,739
% of tweets being retweeted	51.70	58.54	54.46
Total number of retweets	6,187	18,280	7,533
Retweets / retweeted tweet	3.76	9.81	4.33
Retweets / 100 followers	39.39	56.22	84.27
Tweets favorited	1,533	1,713	1,684
% of tweets being favorited	48.15	53.80	52.74
Total number of favorites	4,944	8,768	4,292
Favorites / favorited tweet	3.23	5.12	2.55
Favorites /100 followers	31.48	26.97	48.01

Table 2: Dataset Details and Frequency Distribution of Coded Mentions (*n*=600)[1]

	ReachOut		**headspace**		**YAWCRC**	
	N°	%	N°	%	N°	%
Tweets						
All mentions	4,497	30.6	6,591	44.8	3,610	24.6
Retweets and modified tweets	3,545	78.8	5,298	80.4	2,781	77.0
Original tweets	952	21.2	1,293	19.6	829	23.0
Coding of random selection[2]						
Positive tweets	**168**	**84.0**	**181**	**90.5**	**172**	**86.0**
Endorsement	55	27.5	52	26.0	48	24.0
Helpful	23	11.5	13	6.5	9	4.5
Hopeful	35	17.5	5	2.5	0	0.0
Mental health	24	12.0	42	21.0	34	17.0
Mental health research	5	2.5	2	1.0	64	32.0
Mental health services	26	13.0	67	33.5	15	7.5
Personal change	0	0.0	0	0.0	2	1.0
Negative tweets	**6**	**3.0**	**4**	**2.0**	**2**	**1.0**
Irrelevant tweets	**26**	**13.0**	**15**	**7.5**	**26**	**13.0**
Total	**200**	**100.0**	**200**	**100.0**	**200**	**100.0**

[1] *Dataset collected from August 11, 2014 to January 23, 2015, inclusive*
[2] *200 tweets were randomly selected for analysis*

Table 3: Code Book

Code	Definition	Example
Positive		
Endorsement	Explicit support for, or approval of an organisation	"So proud of @ReachOut_AUS campaign launched today, to let all Yr 12ers know #thereslifeafter - share it!: youtube.com/watch?v=3aGHLo… #MentalAs"
Helpful	Practical advice, suggestions, strategies, or techniques	"Parents guide to @instagram via @headspace_aus. headspace.org.au/parents-and-ca…"
Hopeful	Encouragement, reinforcement, or affirmation	I did something fun for @ReachOut_AUS telling you all not to stress out about exams. Watch it here: thereslifeafter.org/portfolio/dom-…
Mental health	Information on mental health issues or wellbeing	@yawcrc Please sign Petition Stop Cyberbullying Argentine 12 year old sexual abuse victim change.org/p/basta-de-cib… @AbogadaNNyAFlia
Mental health research	Information on a study about mental health issues or wellbeing	"U.K. study reveals #bisexual women more likely to have mental health issues. @headspace_aus bit.ly/1KWsWR3 http://t.co/6xaAX9EwUN"
Mental health services	Information on mental health services	@SusannaFreymark @mesterman @PollyDunning You might also want to talk to @ReachOut_AUS! :)
Favourable personal change	Explicit indications of adjustments an individual has made to promote their wellbeing	After some real consideration and realisation of my recently increased judgment/comparison habits, Instagram is gone. Feels good. @yawcrc
Negative	A complaint, a criticism, or an explicit indication of isolation or disengagement	@Rachel_Worsley @headspace_aus yes but no new beds for them in public hospitals wait list was 2 years. WA is doing it
Irrelevant	Content that was neither positive or negative	Two great opportunities available w/ @yawcrc: Senior Research Analyst + Communications Intern youngandwellcrc.org.au/connect-with-u… #mentalhealth #jobs

Table 4: Chi-Square Tests of Positive Mentions (*n*=600)

Association between Mentions and Organisation	Chi-Square	*df*	Cramer's V[1]	*p* value
Endorsement	0.64	2	0.03	0.73
Helpful	7.50	2	0.11	0.02
Hopeful	57.59	2	0.31	0.00
Mental health	5.86	2	0.10	0.05
Mental health research	117.16	2	0.44	0.00
Mental health services	50.88	2	0.29	0.00

[1] *Cramer's V was used to test the strength of association*

Figures

Figure 1: Websites of ReachOut, headspace, and YAWCRC

ReachOut	headspace	YAWCRC