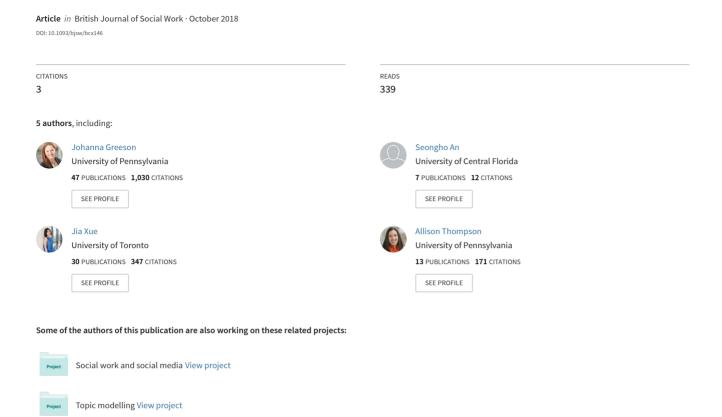
Tweeting Social Justice: How Social Work Faculty Use Twitter



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Abstract

Social media are considered useful tools for academic purposes. Our exploratory study offers insight into the use of Twitter by social work faculty in the USA. Employing an online survey, this study investigates Twitter usage among a sample of social work faculty (n = 274) from the top-fifty-ranked MSW programmes in the USA. Slightly more than half of the participants had Twitter accounts, the majority of whom use Twitter as part of their academic work. The most common motivations for using Twitter include promoting one's research, raising awareness about an area of research and engaging in networking with peers. This study contributes to the literature by describing the prevalence and patterns of Twitter usage among social work academics and lays a foundation for future research, investigating its effectiveness in increasing awareness and promoting changes related to social justice issues.

Keywords: Twitter, social media, social justice, MSW programmes, social work education

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Introduction

Widespread use of social media has changed the environment of communication in many aspects of our society over the decade. People use social media in a variety of ways: sharing life events and photos with close family and friends, building professional networks and promoting causes and issues they care about. Academics have incorporated social media into their disciplines for research and education purposes. A *Nature* survey shows that approximately 4.5 million researchers have accounts on ResearchGate, with another 10,000 new users every day. Social media such as ResearchGate are 'changing science in a way that is not entirely foreseeable' (Noorden, 2014, p. 126). University faculty use social media to interact with students (Moran et al., 2011), disseminate knowledge and resources related to their work (Priem and Costello, 2010) and share information on academic conferences (Ross et al., 2011). Various scientific disciplines use social media for academic purposes, including health professionals (Antheunis et al., 2013), economists (Fox, 2012), physicists and mathematicians (Schriger et al., 2011) and medical educators (Cheston et al., 2013). Twitter, in particular, is used to share academic resources (Veletsianos, 2012), facilitate education and learning (Grosseck and Holotescu, 2008), exchange ideas (Ebner et al., 2010) and promote interactions with scholars in other parts of the world (Dunlap and Lowenthal, 2009).

Across all sectors of social work, including practitioners, students, academics/educators and researchers, there is increased appreciation of the importance of proficiency with social media as part of practice and research efforts (Best et al., 2016). In addition, government and nonprofit organisations use social media to share information about professional services and mission-related work (Guo and Saxton, 2014). Social work academics are called to engage with practitioners in the field so that the fruits of research efforts more effectively reach practice communities. Towards this end, social media offer opportunities to disseminate academic work more broadly, reaching much larger audiences and fostering new ways to collaborate around social justice issues. In addition, recently the American Academy of Social Work and Social Welfare (AASWSW) has promoted the use of technology for social good as one of the twelve challenges for social work (Berzin et al., 2015)—a groundbreaking initiative to champion social progress powered by science. The AASWSW advocates that innovative applications of new digital technology, such as the use of social media by social workers, has the potential to help social and human services reach more people with greater impact on our most pressing social problems (Berzin et al., 2015). However, it remains unknown whether and how social work faculty use social media as part of their academic and scholarly work.

In this study, we address this gap in our knowledge by examining how social work faculty use Twitter in their professional, academic lives. Twitter has recently been examined as a classroom tool in university education (McArthur and Bostedo-Conway, 2012). This study is an important step in furthering our understanding of the use of Twitter among higher-education faculty by focusing on social work academics, who collectively teach the more than 650,000 individuals pursuing social

work as their profession across the USA (Bureau of Labor Statistics, 2017). Our results provide insights about the nature of Twitter usage among social work academics and recommendations for how we can better avail ourselves of this ever-evolving and expanding technology, as we both educate future social workers and strive to build a more just and equitable society.

Social media and social work academics: prior literature

Social media allow academics to enhance teaching and research opportunities. University faculty use social media to enhance the interaction between instructors and students, and enable students to expand their learning opportunities (Turner, 2013). Social media can be used as a new form of communication for reading, commenting and discussing without any restrictions of time and space in the university classroom (Ebner *et al.*, 2010). Following relevant professionals or organisations in their field of study on social media supports student learning and professional development (Dunlap and Lowenthal, 2009). In particular, Twitter offers a platform for students to map their learning by asking questions, adding hashtags and compiling lists of feeds, which extends the classroom and helps develop their public presentation skills (Greenhow and Gleason, 2012). One study found that the use of Twitter in class discussion helps strengthen students' understandings of professional competencies and behaviours (Hitchcock and Battista, 2013).

The use of social media by academics is not without its risks. Downsides include copyright issues and that it can be time-consuming: microblogging contents must be updated frequently to be successful (Bonetta, 2007). Despite such challenges, recent empirical studies show that social media have proliferated throughout academia. Moran and colleagues (2011) have conducted a survey with 1,920 teaching faculty in the USA and found that about two-thirds of faculty use at least one social media site, and that one-third use social media in their class sessions. Another study of 711 academics worldwide surveyed publicly on Twitter by Lupton (2014) shows that more than 90 per cent of faculty who use social media do so for their work.

Scholars can use social media in their research to collaborate with others across schools and countries in a timely manner, share pedagogical practice and build an online research community (Grosseck and Holotescu, 2008). Scholars use Twitter to share information, resources and media related to their work; share information about their classroom and students; request assistance from and offer suggestions to others; and engage in social commentary (Veletsianos, 2012). They can also share links to peer-reviewed resources in order to keep current with topics in one's field of research (Priem and Costello, 2010), circulate

draft forms of academic work for quick comments and disseminate information on academic conferences (Ross *et al.*, 2011). These activities create opportunities for academic support outside of existing networks by connecting users with a wider audience outside of traditional academia (Lupton, 2014).

Social media may also change how scholarship is generated and disseminated. For example, Twitter posts by the general public have provided scientists with information about earthquakes in real time (Greenhow and Gleason, 2014). Twitter also creates the possibilities of connecting social work academics worldwide. For example, the hashtag #SWvirtualpal on Twitter was developed to connect social workers globally, and was created by academics in the USA and UK. The use of hashtags on Twitter has the potential to expand social workers' understanding of social work practice in other parts of the world (Hitchcock, 2016).

Recently, a study on social media use across different disciplines reveals clear disciplinary differences in how scholars use social media (Davis et al., 2012). Social work researchers assert that there are distinct reasons to bring social media into their pedagogy. Ahmedani and colleagues (2011) recognise the emergence of a new educational technology and argue that social workers must be prepared to use these tools wisely, and so social work educators should help students prepare for future careers by cultivating social media literacies. Robbins and Singer (2014) suggest ways to infuse social media into social work education. They argue that social media can be used to maximise the time social work students spend learning content outside the classroom and get updated knowledge efficiently. For example, by following legislators and advocacy organisations on Twitter, social work students can learn about recent changes in social policies that published textbooks do not contain. The authors argue that social work educators should prepare students integrating technological innovation to best serve Additionally, they suggest that social media can be used by social work academics for social advocacy. For example, social work scholars can post a news item about gender or racial discrimination and provide relevant academic content on Twitter.

Although most prior research emphasises the importance of understanding the potential of social media in social work education, no studies have examined how academics in social work use social media generally or Twitter specifically. Therefore, despite some recommendations for social media use in social work education being present in the literature, we know very little about the actual use of Twitter among social work academic faculty. This study attempts to address this gap by answering the following research questions:

- To what extent are academics in social work using Twitter professionally?
- What motivations do they have for using Twitter?

By answering these questions, we hope to offer insights about the use of social media and Twitter among social work academics in the USA, then address to what extent Twitter use among social work academics is associated with improved communication and networking with colleagues, and to what extent Twitter use impacts the dissemination and implementation of social work academics' work.

Method

Instrument

An online survey, using Qualtrics survey software, was developed by the authors to answer questions about social work academics' experience with and use of Twitter. As a pilot test, the survey instrument (see Supplementary Material) was distributed to seventy-seven faculty members from a select number of MSW programmes. Sixteen faculty members completed the survey. Based on feedback from this pilot test, the survey was modified to improve its design (e.g. including a progress bar).

The final survey included thirty-three questions: twenty-five closed items with pre-coded response options and eight questions that required extended written responses. In addition to demographics, participants were asked to report on whether they have a Twitter account and to provide their Twitter IDs that allow access to their tweets used for anonymous quotes for this study. They were asked about their experience relating to a variety of Twitter activities such as frequency of tweets and retweets, number of followers, issues they tweet about and motivation to use Twitter. This study was approved by the university Institutional Review Board.

Recruitment and procedure

The online survey was conducted from 2 to 25 February 2016. At first, an invitation e-mail was sent to all assistant, associate and full professors through their school e-mails obtained from university websites. The invitation included a brief description of the survey, instructions on how to complete it and the link to the survey. After the first round, two reminder e-mails were sent to those who had not responded to our invitation. The survey link closed 21 days after the second reminder e-mail. The response rate of this study was 19.4 per cent, which is considered reasonable for internet-based surveys (Im and Chee, 2004).

Participants

Participants were recruited from the top-fifty-ranked social work programmes in the USA as reported by the 2014 US News & World Report. This report only surveys MSW-level programmes, the terminal degree in social work. We desired to investigate Twitter use among those who educate these future leaders of the social work field. Participants were recruited from the top-fifty-ranked MSW programmes as reported by the 2014 US News & World Report. The initial sample size was 1,446 faculty members. After sending the first-invitation e-mail, we excluded (i) faculty who sent an automatic reply saving they would be out of office more than two weeks (n = 18) and (ii) individuals with undeliverable e-mail addresses (n=18). With a response rate of 19.4 per cent, the final sample included 274 participants. Over half of the respondents were men (53 per cent). Approximately two-thirds of the participants identified as white (66.79 per cent) followed by black/ African American (9.85 per cent) and Asian (4.74 per cent). The average age of the respondents was 47.28 years (SD = 0.93). Over half of the respondents were working at a public university (54 per cent), followed by non-profit private university (28.47 per cent), for-profit private university (4.38 per cent) and liberal arts college (1.46 per cent). Approximately one-third of the participants were teaching in MSW (30 per cent) and Ph.D. (27 per cent) programmes. Approximately one-third of the respondents were assistant professors (33.94 per cent), followed by associate professors (33.58 per cent) and full professors (21.9 per cent).

Results

Twitter use among social work academics

Of the 274 faculty members who participated in this study, most (n=254, 92.7 per cent) had heard of Twitter and approximately half of the participants reported having a Twitter account (53.2 per cent, n=146). Table 1 contains the results of a series of chi-square analyses exploring significant subgroup differences in Twitter usage among the participants. Participants under the age of fifty years were significantly more likely (58.3 per cent) to have a Twitter account than participants over the age of fifty years ((43.0 per cent), X^2 (1, N=239) = 5.57, p=0.02). Asian participants were significantly less likely (15.4 per cent) to report having a Twitter account than non-Asian participants ((53.3 per cent), X^2 (1, N=240) = 7.08, p=0.01). Social work faculty teaching exclusively in the macro concentration were marginally more likely (61.8 per cent) to have a Twitter account than participants teaching in only the clinical

Table 1. Subgroup differences in Twitter usage among social work academics.

		N	Have a Twitter account (%)	χ^2
Teaching concentration	Macro only	89	61.8	2.93 [†]
_	Clinical only	82	48.8	
Gender	Male	75	46.7	2.73
	Female	168	53.0	
Age	<50 years	132	58.3	5.57*
	≥50 years	107	43.0	
Race	White	183	53.6	1.63
	Black	27	55.6	0.23
	Asian	13	15.4	7.08**
	Multi-racial	13	38.5	0.90
	Hispanic	14	71.4	2.47
Location	North-east	60	50.0	0.01
	Mid-west	83	53.0	0.29
	South	60	50.0	0.01
	West	23	47.8	0.08
University ownership	Private	90	51.1	0.00
, , , , ,	Public	154	51.3	
Faculty position	Assistant prof.	93	51.6	0.00
	Associate prof.	92	53.3	0.20
	Full prof.	60	48.3	0.30

 $^{^{\}dagger}p < 0.10$: *p < 0.05: **p < 0.01.

concentration ((48.8 per cent), X^2 (1, N=171) = 2.93, p=0.09). Macro social work refers to 'an essential component of social work practice, targeting change in organizations, communities, and political systems' (Pritzker and Applewhite, 2015, p. 191), while micro or clinical social work indicates individual-level direct intervention.

In terms of other demographic characteristics, participants who reported having a Twitter account did not significantly differ from those without a Twitter account on gender, ethnicity, regional location, higher-education setting (i.e. private versus public university) and career stage (i.e. assistant, associate, full professor).

We further analysed the nature of Twitter use among participants who reported having a Twitter account (see Table 2). One-fifth (19.9 per cent, n=29) of participants with Twitter accounts reported logging on to Twitter at least once a day, and nearly half logged on at least once a week (46.6 per cent, n=68). Among those with a Twitter account, roughly one-quarter (23.3 per cent, n=34) had twenty-five or fewer followers, one-quarter (25.3 per cent, n=37) had 26–100 followers, one-quarter (24.0 per cent, n=35) had 101–500 followers and approximately one-tenth (11.6 per cent, n=17) had more than 500 followers. The rest either did not know how many followers they had (n=17) or did not answer the question (n=6). The number of followers indicates the level

Table 2. Nature of Twitter usage (N = 146).

	Frequency	Percentage
Number of followers		
0–25	34	23.3
26–50	16	11.0
51-100	21	14.4
101–200	16	11.0
201–500	19	13.0
501-1,000	10	6.9
1,001–2,000	4	2.7
2,000+	3	2.1
I don't know	17	11.6
Missing values	6	4.1
Numbers of people/orgs following		
0–25	40	27.4
26–50	21	14.4
51–100	18	12.3
101–200	17	11.6
201–500	17	11.6
501-1,000	9	6.2
1,001-2,000	6	4.1
2,000+	1	0.7
I don't know	11	7.5
Missing values	6	4.1
Numbers of tweets		
0–25	43	29.5
26–50	11	7.5
51–100	8	5.5
101–200	9	6.2
201–500	15	10.3
501–1,000	6	4.1
1,001–2,000	4	2.7
2,000+	10	6.9
I don't know	34	23.3
Missing values	6	4.1

of potential audience size (Dow *et al.*, 2013). Existing studies measure the audience size by the number of 'followers' because the more followers you have on Twitter, the people you can reach, the more people can read your tweets and the larger effect of your online word of mouth (Ju *et al.*, 2014; Rui *et al.*, 2013).

When asked to estimate the number of tweets they currently have, roughly a quarter (23.3 per cent, n=34) of the participants did not know and, of those who knew (n=106), half (50.9 per cent, n=54) reported having fifty or fewer tweets, 16 per cent (n=17) had 51–200 tweets, 14 per cent (n=15) had 201–500 tweets and 18.9 per cent (n=20) had more than 500 tweets. Roughly one-quarter (27.4 per cent, n=40) reported following fewer than twenty-five people or organisations and over half (54.1 per cent, n=79) reported following fewer than 100.

Motivation to use Twitter among social work academics

Using a seven-point Likert-type scale (1 = strongly agree; 7 = strongly)disagree), participants were asked to rate their motivation for using Twitter across eighteen items (see Table 3). The motivations with which participants most strongly agreed were to share resources (M = 2.26,SD = 1.27), to network with colleagues (M = 2.29, SD = 1.37) and to promote awareness across an area of study (M = 2.30, SD = 1.40). The motivations with which participants most strongly disagreed were to express their opinions freely in an area of study (M = 3.95, SD = 1.68) and to participate and/or debate in an online discussion of an area of study ($\hat{M} = 4.11$, SD = 1.95). Following these questions, participants were then asked to identify their biggest motivator. Two most frequently cited motivators were to promote action/awareness of an area of study and to promote their own scholarly work. Participants were also asked to provide an example of this motivation in their own tweeting. Such examples included tweeting the release of journal articles or features in news media related to their area of study, expressing support for new policy, sharing information that may shift popular opinion or stereotypes, advertising about upcoming academic conferences, engaging social work students in class participation via Twitter, tweeting accomplishments of students from schools of social work and sharing university resources with fellow faculty members.

How social work academics use Twitter

The majority (58.2 per cent) of participants with a Twitter account reported using Twitter as part of their academic work. Participants also reported that they often tweeted about social justice issues to raise awareness, promote social change and share information and resources. Nearly half of the participants with a Twitter account reported tweeting (48.2 per cent) or retweeting (48.8 per cent) about a social justice issue at least a few times per month.

Participants were asked to select one topical area of social work about which they tweeted and retweeted most (see Table 4). They most frequently tweeted about the areas of social policy, mental health, geriatrics, health, and racial and ethnic disparities. The areas in which participants most frequently and infrequently retweeted were similar in content to the areas in which they most frequently and infrequently tweeted.

Participants were asked about what type of people or organisations they followed on Twitter (see Table 5). The respondents were more likely to follow users in their professional fields than those with whom they have personal relations or shared interests. Of those who responded

Table 3. Motivation for using Twitter (N = 82).

	Motivation (1=Strongly agree; 7=Strongly disagree)	Mean	SD	Example
Advocacy	Promote action related to my area of study	2.52	1.42	No more #solitaryconfinement for youth in federal prisons #socialwork #humanrights https://t.co/DirvjZdyV
Establishing expertise	Advocate for issues related to my area of study Participate and/or debate in online discussions in my area of study	2.40	1.54	A Clever Campaign to Help Aged-Out Foster Youth I stand with against #discrimination. We must push back against hate. #HumanRights #SocialWork
	Express my opinion freely in my area of study	3.95	1.68	Undocumented immigrants late to know about lead in water, scared to get help
	Establish my expertise in my area of study	3.20	1.78	More than 60% of US women farmworkers experience sexual harassment. We must stop
	Gain professional status in my area of study	3.16	1.7	Climate change is a #humanrights issue. #SocialWork must act to prevent human suffering
	Could lead to tangible or intangible benefits related to my professional life	2.79	1.5	Check out this job what a great opportunity to enhance community engagement higher ed institutions! https://t.co/ivGsskYbOU
Network building	Network w/ people outside of my field	3.07	1.61	Excellent example of inter-disciplinary research with potential to change the world
)	Establish a professional online presence in relation to my area of study	2.40	1.47	forward to connect w/ people interested creating online community to enhance
	Network with colleagues	2.29	1.37	@RLBriones love to hear more about your work and ideas
Sharing information	Get other points of view/opinions on various issues in my area of study	3.09	1.6	How can we eliminate #ChildPoverty in the USA
	Conferences to tweet out content from the conferences	3.04	1.96	'Social workers must walk in places that other people run from.'—John H. Jackson @SchottFound #2015APM
	Promote my own scholarly work	2.89	1.56	Just published a paper with Jen Geiger on Pregnant and Parenting Journal of Public
	Retrieve up to date information in my area of study	2.73	1.56	Did you know cancer kills an estimated 8 million people per year globally and that tobacco still leads in causing cancer deaths
	Gain new knowledge in my area of study	2.62	1.51	More children are living in poverty than adults #Socialwork must fight to #endpoverty
	Share news stories	2.57	1.31	Maternal depression and poverty http://www.washington post.com/wp-dyn/content/article/2010/08/26
	Promote awareness of my area of study	2.30	1.4	Creativity a lifeline for people w/ #dementia—helps to spark memories
	Share resources	2.26	1.27	Can a text message save a life? Technology supports four victims of #human

Table 4. Areas of tweets and retweets.

What areas do you tweet and retweet about most?	Tweet (N =81) n (%)	Retweet (N =74) n (%)	Example tweet
Social policy	9 (11.1)	11 (14.9)	New on https://t.co/8pxKdRDxAR CfP:
Mental health	8 (9.9)	7 (9.5)	Policy Reviews in Higher Education How does the deaths and witnessing the deaths on video impact mental health? #KentSchoolConversation
Geriatrics	7 (8.6)	5 (6.8)	Let's fix our protective service system to end #elderabuse and assure older adults are safe at home:
Health	7 (8.6)	4 (5.4)	Neighbourhood formal social organisation matters for resident health. My new article in H&SW
Racial and ethnic disparities	7 (8.6)	6 (8.1)	We all have #humanrights to life and voice. It's time to shout! #blacklivesmatter #socialwork
Child welfare	6 (7.4)	6 (8.1)	We must address violence & safety to help kids thrive in #RVA.—A. Jones @RPS_Schools @ChildSaversRVA @BridgeRichmond
Poverty	6 (7.4)	6 (8.1)	#Poverty is injustice, social exclusion, & discrimination. We have a right to #dignity. #Humanrights #socialwork
Education	5 (6.2)	5 (6.8)	Education gap between rich & poor is growing!! This is a #humanrights #socialwork emergency!
Substance use	5 (6.2)	2 (2.8)	We are working to reduce youth violence & substance use in our community #BridgingtheGap—@VCUpresident
Research methods	4 (4.9)	1 (1.4)	@clairlemon Anecdotes aren't case studies. Case studies use the scientific method
Evidence-based practice	3 (3.7)	3 (4.2)	Applebaum—Great suggestions for #LTSS, including additional EBPs on worker training and supervision. #WHCOA
Violence	3 (3.7)	3 (4.2)	@nabholzj Anger is not the problem. Violence is the problem. People should certainly be angry that AHCA would uninsure millions
Social entrepreneurship	2 (2.5)	2 (2.8)	How do we develop the language of systems entrepreneurship? @RachelmSinha #secon17
News/politics	2 (2.5)	3 (4.2)	I think I just got whiplash. House Republicans Back Down on Bid to Gut Ethics Office
Non-profits	1 (1.2)	3 (4.2)	The opportunity in social media for non- profits @RichGreif https://t.co/ qQX9m0DB0M
Other	6 (7.4)	7 (9.5)	34.00880111

AHCA: American Health Care Act of 2017.

(n=133), the majority followed universities and departments (60.9 per cent), advocacy organisations (60.1 per cent), researchers (57.1 per cent), news outlets and others in the same field (51.9 per cent), but fewer than

Table 5. Types of people or organisations followed on Twitter.

Type of people or o	organisations following on Twitter (multiple choice)	Frequency	Percentage
Personal	Friends & family	60	45.1
	Lifestyle blogs/outlets	26	19.5
	Celebrities	18	13.5
	Athletes	13	9.8
	Comedians	13	9.8
	Musicians/bands	12	9.0
	Restaurants/local businesses	10	7.5
	Movies & TV shows	10	7.5
	Companies	4	3.0
	Notable brands	3	2.3
Professional	Universities/departments	81	60.9
	Advocacy organisations	80	60.1
	Researchers	76	57.1
	News outlets	72	54.1
	Others in my field	69	51.9
	Political organisations	60	45.1
	Government agencies	54	40.6
	Journalists	49	36.8
	Other non-profits	48	36.0
	Politicians	41	30.8
	Authors	40	30.1
	Charities	31	23.3
	Science & tech content producers	23	17.3
	Professional consultants	16	12.0
	Other	22	16.5

half of them followed friends and family (45.1 per cent) and lifestyle blogs and outlets (19.5 per cent) on Twitter. Fewer participants used Twitter for entertainment, such as following athletes and comedians (9.8 per cent), musicians and bands (9.0 per cent) and movies and TV (7.5 per cent).

Discussion

This study is the first to examine Twitter use among social work faculty members in the USA or worldwide. It provides suggestions to social work researchers and educators for moving the field forward in terms of using Twitter to support and advance social work education in the era of the third-generation Web, which is marked by increased connectivity, openness and intelligence.

Twitter use among social work academics

Roughly half of the 274 participants reported having a Twitter account compared to 23 per cent of all online adults from the general population (Duggan, 2015) and 10.5 per cent of faculty from a representative study

of social media use among nearly 8,000 faculty at US higher-educational institutions (Seaman and Tinti-Kane, 2013). It is plausible that faculty from the top MSW programmes in the USA utilise Twitter at a higher rate compared to all higher-education faculty. It is also plausible that there is selection bias in our sample and faculty with Twitter accounts were more likely to respond to our survey. We attempted to address this as best we could by using rigorous sampling and recruitment methods to secure as much of a representative sample as possible. We used e-mail to recruit participants, and 99.4 per cent of the faculty teaching in the MSW programmes selected for our study had e-mail addresses publicly available on school websites. Thus, roughly half of our sample did not have a Twitter account, representing a broader array of experiences among US social work faculty.

Forty per cent of our participants reported not using Twitter for academic work. It is likely that some scholars are concerned about the potential risks of social media, such as misunderstanding their messages in an unexpected way, or disadvantages from their institutions. Indeed, scholars have been disciplined, placed on leave or had their job offer revoked for social media messages they had posted (Bowman, 2015).

Faculty in the MSW programmes had relatively small network sizes compared to the general population. Over three-quarters of our participants reported having fewer than 500 followers and followees, while the average Twitter user in the general population had 707 followers as of 2016. Twitter users who have a sizable number of followers tend to be opinion leaders who influence other users receiving their tweets (Holmberg and Thelwall, 2014; Stewart, 2015). Therefore, it is plausible that academic Twitter users who want to establish their expertise may have more followers, while those who use Twitter for building networks within their field of study are less likely to be motivated to have more followers.

Similarly to other studies among Twitter users in the general population (Statista, 2016b) and in higher-education settings (Seaman and Tinti-Kane, 2013), age was negatively associated with Twitter use, with younger social work faculty from our study significantly more likely to use Twitter than older social work faculty. Although older adults are less likely to use social media than young adults, social media usage among adults aged sixty-five and older has more than tripled from 11 per cent in 2010 to 35 per cent in 2016 (Duggan and Page, 2015). Coupled with the fact that Americans with higher-education levels are more likely to use social media (Duggan and Page, 2015), the use of social media platforms, including Twitter, will likely increase among older faculty in the coming years.

Faculty teaching exclusively in the macro concentration were marginally more likely to use Twitter than faculty teaching only clinical practice. The connection between the utility of Twitter in terms of unifying a

group of followers around a particular social issue and the goal of macro social work to impact community-level or organisational-level change is logical. Twitter can be used to support community and connections among large groups of people around shared interests, to gather and share information and to establish common ground (Chen, 2011). However, we did not find significant difference between macro- and micro-concentration Twitter users regarding the motivations and behaviours of their Twitter use.

Asian faculty was significantly less likely to use Twitter as compared to their non-Asian counterparts. Given the fact that Asians comprise the largest group of Twitter users globally (Statista, 2016b), this trend may seem somewhat surprising. However, the majority of Twitter users in Asian countries may be adolescents and young adults rather than university faculty. For example, a study examining teenagers as a percentage of active Twitter users in select countries found that 87 per cent of active Twitter users in the Philippines were teenagers whereas only 18 per cent of active Twitter users in Canada were teenagers (Statista, 2016a).

Other demographic characteristics, such as gender, ethnicity and regional location, were not significantly associated with difference in having a Twitter account. Studies in the general population indicate that there is little difference in Twitter use based on ethnicity, with blacks (28 per cent) and Hispanics (28 per cent) marginally more likely than whites (20 per cent) to use Twitter (Duggan, 2015). Findings from our study mirror this trend, in that minorities were more likely to use Twitter than whites. However, the differences we observed between black versus non-black, Hispanic versus non-Hispanic and white versus non-white participants were statistically insignificant.

Motivation to use Twitter

Participants from our study reported that their strongest motivations to use Twitter were to participate in online discussions, to share resources, to network with colleagues and to promote awareness across an area of study. These results indicate that Twitter provides social work scholars with an online platform where they can discuss academic issues with others across schools and countries in a timely manner (Grosseck and Holotescu, 2008) and thereby develop a research community in an open but less formal atmosphere than the university setting (Kirkup, 2010).

When asked to identify their biggest motivator, our participants most frequently cited promoting action/awareness of an area of study and promoting their own scholarly work, consistently with Lupton (2014). Regarding the promotion of one's work within academia, Priem and

colleagues (2012) propose that social media may also be used to measure scholarly impact, suggesting that "alternative metrics" or "altmetrics" build on information from social media use, and could be employed side-by-side with citations—one tracking formal, acknowledged influence, and the other tracking unintentional and informal "scientific street cred" (p. 1). Relatedly, the use of social media sites such as Twitter facilitates an immediate, rapid distribution and promotion of one's academic work. For example, Priem and Costello (2010) find that 39 per cent of Twitter citations refer to articles less one week old and 15 per cent refer to articles published that day.

How social work academics use Twitter

The majority of our participants who have a Twitter account used it as part of their academic work, connecting with users in their professional fields. Nearly half of them regularly tweeted or retweeted about a social justice issue, such as social policy, racial and ethnic disparities and poverty. Participants reported tweeting about social justice issues in order to raise awareness, promote social change and share information and resources. The use of Twitter to promote social justice is reflective of the National Association of Social Workers' Code of Ethics (2008), which identifies the promotion of social justice as one of its core ethical principles: 'Social workers pursue social change, particularly with and on behalf of vulnerable and oppressed individuals and groups of people. Social workers' social change efforts are focused primarily on issues of poverty, unemployment, discrimination, and other forms of social injustice.'

Indeed, the ability for social work academics to reach large groups of people across disciplines and with varying value systems makes Twitter an ideal conduit for increasing awareness and promoting change related to social justice issues. It is often challenging for academics to make their work accessible, known and translatable across disciplines and beyond academia (Proctor *et al.*, 2011), and Twitter provides an opportunity to extend academics' reach and impact to promote social justice (Priem and Costello, 2010).

While the majority of participants from our study reported that they used Twitter for online discussions, sharing resources, networking with colleagues and promoting awareness across an area of study, few participants discussed the use of Twitter as a teaching tool. However, this may represent opportunities for advancing the use of social media among social work academics in the USA. Grosseck and Holotescu (2008) provide a framework for using Twitter in educational settings. They suggest using Twitter in the classroom in order to build a greater sense of community, explore collaborative writing, gauge students' responses to

classroom material and lectures, foster collaboration with similar learners across schools and countries, encourage reflection and discussion, and share supplemental research and resources. They suggest that such activities may facilitate richer and more engaged classroom dynamics, as more students with varying communication styles may be drawn into classroom dialogue, academic staff may have a better pulse on the educational needs of the students and students may experience a closer connection with the faculty.

Limitations

There are several limitations to our study. First, there may be some selection bias, as it is possible that social work academics with Twitter accounts were more likely to respond to the survey. Second, our data are cross-sectional, which constrains our ability to examine the pattern of social work scholars' social media behaviour or infer causal relationship. Third, our study is limited to top MSW programmes in the USA, which limits our generalisability to both other social work degree programmes (e.g. BSW and DSW) and other countries. Fourth, the number of Asian and Hispanic participants from our study is low, and so our discussion surrounding Twitter use based on race/ethnicity should be interpreted with caution.

Notwithstanding these limitations, our study provides a significant contribution to the field of social work education. As one of the early studies to examine Twitter use among social work academics, our exploratory study lays a good foundation for future research investigating the benefits, strategies and impacts of Twitter use among social work faculty. Expanded research may provide guidance to social work academics regarding the most effective usage of Twitter, particularly as it pertains to the promotion of social justice. A greater, stronger presence of social work academics utilising Twitter effectively may serve to advance our field and the areas of social justice our field represents.

Further research

Our exploratory study lays the foundation for additional research regarding the effectiveness of Twitter use among social work faculty. Such research may include an investigation of the outcomes associated with Twitter use among social work faculty. For example, future research questions may include: (i) To what extent is Twitter use among social work academics associated with improved communication and networking with colleagues from within one's field and across fields? (ii) To what extent does Twitter use impact the citation, dissemination

and implementation of social work academics' work? Future studies may utilise publicly available Twitter data rather than relying on self-reported survey data, which would provide credible evidence of participants' behaviour on social media. Future research could also include a qualitative investigation about the kind of scholarly benefits (e.g. international network and resulting in research project) or barriers (e.g. lack of time, privacy concern, copyright issues) social work scholars identify with social media as well as quantitative research that examines what factors influence social work academics' adoption and use of social media.

Additionally, the relationship between the promotion of social justice and Twitter use among social work faculty warrants further research. In light of our finding that many social work academics use Twitter to promote social justice, future research could explore (i) the extent to which social work academics' attitudes towards social justice are associated with Twitter use and (ii) the extent to which Twitter use impacts the attitudes of others towards social justice issues.

References

- Ahmedani, B. K., Harold, R. D., Fitton, V. A. and Shifflet, E. D. (2011) 'What adolescents can tell us: Technology and the future of social work education', *Social Work Education*, **30**(7), pp. 830–46.
- Antheunis, M. L., Tates, K. and Nieboer, T. E. (2013) 'Patients' and health professionals' use of social media in health care: Motives, barriers and expectations', *Patient Education and Counseling*, **92**(3), pp. 426–31.
- Berzin, S. C., Singer, J. and Chan, C. (2015) 'Practice innovation through technology in the digital age: A grand challenge for social work', October, available online at http://aaswsw.org/grand-challenges-initiative/12-challenges/ (accessed 7 July 2017).
- Best, P., Manktelow, R. and Taylor, B. J. (2016) 'Social work and social media: Online help-seeking and the mental well-being of adolescent males', *British Journal of Social Work*, **46**(1), pp. 257–76.
- Bonetta, L. (2007) 'Scientists Enter the Blogosphere', Cell, 129(3), pp. 443-5.
- Bowman, T. D. (2015) 'Differences in personal and professional tweets of scholars', *Aslib Journal of Information Management*, **67**(3), pp. 356–71.
- Bureau of Labor Statistics (2017) *Occupational Outlook Handbook*, 2016–17 Edition, Social Workers, US Department of Labor, available online at *https://www.bls.gov/ooh/community-and-social-service/social-workers.htm* (accessed 7 July 2017).
- Chen, G. M. (2011) 'Tweet this: A uses and gratifications perspective on how active Twitter use gratifies a need to connect with others', *Computers in Human Behavior*, **27**, pp. 755–62.
- Cheston, C. C., Flickinger, T. E. and Chisolm, M. S. (2013) 'Social media use in medical education: A systematic review', *Academic Medicine*, **88**(6), pp. 893–901.
- Davis , C. H., Deil-Amen, R., Rios-Aguilar, C. and Gonzalez Canche, M. S. (2012) 'Social media in higher education: A literature review and research directions', report printed by the University of Arizona and Claremont Graduate University.

- Dow, P. A., Adamic, L. A. and Friggeri, A. (2013) 'The anatomy of large Facebook cascades', *ICWSM*, **1**(2), p. 12.
- Duggan, M. and Page, D. (2015) 'Mobile messaging and social media 2015', Pew Research Center, available online at http://www.pewinternet.org/2015/08/19/mobilemessaging-and-social-media-2015 (accessed 18 December 2017).
- Duggan, M. (2015) 'Mobile Messaging and Social Meida 2015', Available online at http://www.pewinternet.org/2015/08/19/mobile-messaging-and-social-media-2015/ (accessed December 2017).
- Dunlap, J. C. and Lowenthal, P. R. (2009) 'Horton hears a tweet', *Educause Quarterly*, **32**(4), pp. 1–11.
- Ebner, M., Lienhardt, C., Rohs, M. and Meyer, I. (2010) 'Micro-blogs in higher education: A chance to facilitate informal and process-oriented learning', *Computers and Education*, **55**, pp. 92–100.
- Faculty Focus (2010) Twitter in Higher Education 2010: Usage Habits and Trends of Today's College Faculty, Madison, WI, Magna Publications, Inc.
- Fox, J. (2012) 'Can blogging change how ecologists share ideas? In economics, it already has', *Ideas in Ecology and Evolution*, **5**(2), pp. 74–7.
- Greenhow, C. and Gleason, B. (2012) 'Twitteracy: Tweeting as a new literary practice', *The Educational Forum*, **76**, pp. 464–78.
- Greenhow, C., and Gleason, B. (2014) 'Social scholarship: Reconsidering scholarly practices in the age of social media', *British Journal of Educational Technology*, **45**(3), pp. 392–402.
- Grosseck, G. and Holotescu, C. (2008) 'Can we use Twitter for educational activities', in 4th International Scientific Conference, eLearning and Software for Education, April, Bucharest, Romania.
- Guo, C. and Saxton, G. D. (2014) 'Tweeting social change: How social media are changing nonprofit advocacy', *Nonprofit and Voluntary Sector Quarterly*, **43**(1), pp. 57–79.
- Hitchcock, L. (2016) '#SWvirtualpal: Hashtagging for connection', 24 September, available online at http://www.laureliversonhitchcock.org/2016/09/24/swvirtualpalhashtagging-for-connection/ (accessed 18 December 2017).
- Hitchcock, L. I. and Battista, A. (2013) 'Social media for professional practice: Integrating Twitter with social work pedagogy', *Journal of Baccalaureate Social Work*, 18(Suppl 1), pp. 33–45.
- Holmberg, K. and Thelwall, M. (2014) 'Disciplinary differences in Twitter scholarly communication', *Scientometrics*, **101**(2), pp. 1027–42.
- Im, E. O. and Chee, W. (2004) 'Recruitment of research participants through the Internet', Computers Informatics Nursing, 22(5), pp. 289–97.
- Ju, A., Jeong, S. H. and Chyi, H. I. (2014) 'Will social media save newspapers? Examining the effectiveness of Facebook and Twitter as news platforms', *Journalism Practice*, 8(1), pp. 1–17.
- Kirkup, G. (2010) 'Academic blogging: Academic practice and academic identity', London Review of Education, 8(1), pp. 75–84
- Lupton, D. (2014) 'Feeling better connected: Academics' use of social media', University of Canberra, available online at https://www.canberra.edu.au/about-uc/faculties/arts-design/attachments2/pdf/n-and-mrc/Feeling-Better-Connected-report-final.pdf (accessed 18 December 2017).
- McArthur, J. A. and Bostedo-Conway, K. (2012) 'Exploring the relationship between student- instructor interaction on Twitter and student perception of teacher

- behaviors', International Journal of Teaching and Learning in Higher Education, **24**(3), pp. 286–92.
- Moran, M., Seaman, J. and Tinti-Kane, H. (2011) 'Teaching, learning, and sharing: How today's higher education faculty use social media', Pearson Learning Solutions and Babson Survey Research Group, April, available online at http://files.eric.ed.gov/fulltext/ED535130.pdf (accessed 18 December 2017).
- National Association of Social Workers' Code of Ethics (2017) Available online at https://www.socialworkers.org/About/Ethics/Code-of-Ethics (accessed December 2017).
- Noorden, R. V. (2014) 'Online collaboration: Scientists and the social network', 15 August, available online at https://www.nature.com/news/online-collaboration-scientists-and-the-social-network-1.15711 (accessed 18 December 2017).
- Priem, J. and Costello, K. L. (2010) 'How and why scholars cite on Twitter', *Proceedings of the ASIST Annual Meeting*, p. 47.
- Priem, J., Piwowar, H. A. and Hemminger, B. M. (2012) 'Altmetrics in the wild: Using social media to explore scholarly impact', available online at http://arxiv.org/httml/1203.4745 (accessed 18 December 2017).
- Pritzker, S. and Applewhite, S. R. (2015) 'Going "macro": Exploring the careers of macro practitioners', *Social Work*, **60**, pp. 191–9.
- Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A. and Hensley, M. (2011) 'Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda', *Administration and Policy in Mental Health and Mental Health Services Research*, **38**, pp. 65–76.
- Robbins, S. P. and Singer, J. B. (2014) 'From the editor—The medium is the message: Integrating social media and social work education', *Journal of Social Work Education*, **50**(3), pp. 387–90.
- Ross, C., Terras, C., Warwick, M. and Welsh, A. (2011) 'Enabled backchannel: Conference Twitter use by digital humanists', *Journal of Documentation*, **67**(2), pp. 214–37.
- Rui, H., Liu, Y. and Whinston, A. (2013) 'Whose and what chatter matters? The effect of tweets on movie sales', *Decision Support Systems*, **55**(4), pp. 863–70.
- Schriger, D. L., Chehrazi, A. C., Merchant, R. M. and Altman, D. G. (2011) 'Use of the internet by print medical journals in 2003 to 2009: A longitudinal observational study', *Annals of Emergency Medicine*, **57**(2), pp. 153–60.
- Seaman, J. and Tinti-Kane, H. (2013) 'Social media for teaching and learning: Annual survey of social media use by higher education faculty', Pearson, Available online at http://www.pearsonlearningsolutions.com/assets/downloads/reports/social-media-for-teaching-and-learning-2013-report.pdf#view=FitH,0 (accessed December 2017).
- Statista (2016a) 'Distribution of Twitter users worldwide from 2012 to 2018, by region', available online at http://www.statista.com/statistics/303684/regional-Twitter-user-distribution/ (accessed 18 December 2017).
- Statista (2016b) 'Number of Twitter users in the United States as of January 2015, by age group (in millions)', available online at http://www.statista.com/statistics/398152/us-Twitter-user-age-groups/ (accessed 18 December 2017).
- Stewart, B. (2015) 'Open to influence: What counts as academic influence in scholarly networked Twitter participation', *Learning, Media and Technology*, **40**(3), pp. 287–309.

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- Turner, L. M. (2013) 'Encouraging professional growth among social work students through literature assignments: Narrative literature's capacity to inspire professional growth and empathy', *British Journal of Social Work*, **43**(5), pp. 853–71.
- Twitter Usage/Company Fact (2016) 31 March, available online at https://about. Twitter.com/company (accessed 18 December 2017).
- Veletsianos, G. (2012) 'Higher education scholars' participation and practices on Twitter', *Journal of Computer Assisted Learning*, **28**(4), pp. 336–49.