

# **ARTICLE**

# Negotiating Authority: Disability, Interactions and Power Relations on Twitter

Jens Ineland, Stefan Gelfgren and Coppélie Cocq

Umeå University, SE

Corresponding author: Jens Ineland (jens.ineland@umu.se)

Social media is often seen as an arena for negotiation of power, where marginalized voices can be given influence in the public debate. This study focuses the use of Twitter for discussions related to disabilities and disability policy in Sweden. The empirical material is gathered through the hashtag (#) "funkpol", the primary hashtag used to discuss such topics. Empirical data was gathered using a scripted Google spreadsheet. Over a period of 6 months, approximately 10.000 tweets were retrieved. Our findings show nine different categories of twitterers. According to patterns visible in the study, the most active twitterers – the private twitterers – reached out to the established power (advocacy organizations, politicians and media). However, these instances did not respond as much as they were addressed – at least not directly on Twitter. The article shows how private actors are active but not picked up in the public debate. Instead, established power structures prevailed.

**Keywords:** Power; disabilities; social media; Twitter; authority

## Introduction

The internet in general, and social media in particular (such as Twitter, Facebook, Instagram, etc.), is often seen as an arena for negotiating authority and power, with the potential to challenge established power structures (Rainie and Wellman 2012; Jenkins 2006; Castells 2003; Rheingold 1994). This article investigates how and to what extent it is possible to claim that digital media constitutes a tool and a means for negotiating power structures for people with disabilities. It discusses and analyses such assumptions through a quantitative study based on Twitter data gathered from the hashtag (#) funkpol, a tag used for discussing issues related to disabilities and disability policy in Sweden. This article focuses on the field of disabilities and disability policy in Sweden, a field where the voices of people with disabilities are traditionally heard through representatives of voluntary or advocacy organizations or from governmental institutions. It is commonly believed that through social media this structure potentially can be altered.

The aim of the study is two-fold: first, to detect and map the network of actors on Twitter that discuss topics related to disabilities and politics in Sweden, and second, to interpret the power relation between different categories of tweeting actors. The research questions are what types of actors are active on Twitter and what does the network of power relation between them look like? Is a social media service like Twitter an arena for raising marginalized voices and giving them a place in the public debate, or are there other structures in place holding back the potential disruptive power of social media? Despite a growing body of research about the potentials of digital media for marginalized groups, studies investigating questions of authority and social inclusion for people with disabilities on the internet and social media platforms have been relatively scarce. Nevertheless, technology has a long history in relation to disability; we commonly think that certain technologies are helpful for people with disabilities (i.e., by improving mobility, the ability to read or consume media, handle day-to-day tasks, etc.) (Durkin & Conti-Ramsden 2014; Raghavendra et al. 2015; Johnson 2019). In addition, digitalization in society has had a strong impact on how we communicate in our daily lives, for instance on remote communication, including phone calls, texting, e-mail, chat, social media and other online services for communication (see also Caron & Light 2016), central in contemporary society (Buchholza et al. 2018). Being able to handle remote communication, new digital technology and access to social media platforms have also been seen as new arenas where people with disabilities may challenge norms and rule systems. For instance, Steinfeld, Ellison and Lampe (2008) argue that social media networking is often linked to social capital (i.e., the social inclusion and the influence and benefits that a person receives from their relationships and interactions with other people at an individual and community level) (see also Haller 2010; Thackeray & Hunter 2010; Palmer et al. 2012; Chadwick et al. 2013; Caron & Light 2016). For people with certain disabilities, this may be a challenge, considering abilities to gain and bridge social capital relate to the composition of one's (online) network, one's position in this network and one's communicative and

analytical skillset (Ellisson et al. 2014). Based on these assumptions, different social media platforms are more or less suitable for people with various disabilities in relation to social capital – here understood as the 'ability of individuals or groups to access resources embedded in their social network' (Ellison et al. 2014: 856). Compared to Twitter, analysed in this article, Facebook or Instagram may be more appropriate for people with disabilities, as these platforms to a larger extent allow users to maintain broader and more diverse social networks (see also Ellison et al. 2010).

Molin et al. (2015) view the internet as a 'new form of a community arena that creates other opportunities for belonging and alternative – and more multidimensional – identities' (23). Lövgren-Mårtensson (2008) identifies the internet as a new 'free zone' where people with disabilities can freely and individually, on their own, socialize and spend time away from anyone else on their own premises. The so-called new media can also open for possibilities of self-representations (Cocq & Ljuslinder, forthcoming) and for an increased visibility in society (Pearson & Trevisan 2015). However, for people with disabilities, online participation and social media activities are double-edged: on the one hand, there are concerns about issues of online safety, while, on the other hand, social media activities are at the same time commonly viewed as holding the potential to strengthen self-determination and increase social capital (see also Raghavendra et al. 2013; Molin et al. 2015; Ramsten 2018).

# Swedish disability policy

Since the 1960s, normalisation has been a key concept and 'conceptual banner' (Tøssebro 2016: 112) in Swedish disability policy, setting the stage for de-institutionalization and de-differentiation in service provision (Ineland 2016). Expanding in the 1990s, community living and acceptable living conditions for all have been strongly emphasized. A 'society for all' has been a guiding principle in the planning, organizing and exercise of various organizational settings and support systems that provide services for people with disabilities (Ineland & Hjelte 2017). In recent decades, disability policies have developed from a strong belief in large-scale and centralized public services to an increased emphasis on individual freedom, diversity and freedom of choice (Ineland, Molin & Sauer 2013). Consequently, since the Act Concerning Support and Service for Persons with Certain Functional Impairments (SFS 1993:387) was implemented in the mid-1990s, service provision has become more differentiated and sectorial. This ideological turn has opened up more local initiatives and greater discretion amongst professionals to organize and implement support.

Sweden's disability politics is influenced by the United Nations Convention on the Rights of Persons with Disabilities (CRPD) (United Nations 2007), not least reflected in the Act Concerning Support and Service for Persons with Certain Functional Impairments – LSS (SFS 1993: 387). CRPD was ratified by Sweden in 2008 and obligates states to ensure access to a range of support services, including personal assistance necessary to support living and inclusion in the community and to prevent isolation or segregation from the community (SFS 1993:387). The vision is as ambitious in relation to internet use. Nevertheless, as pointed out by Ramsten (2018), although Sweden has one of the highest internet access rates in the world, there are inequalities in internet use and social media activities between people without and with a disability (for international comparisons, see also Scholz, Yalcin & Priestley 2017; Goggin et al. 2017; Goggin 2018).

In recent years, disability policy has strongly emphasized active citizenship and how public policy, through redistributive and regulatory measures, enables citizens with disabilities to maintain security through social rights, personal autonomy and influence in public deliberation and decision-making processes (Halvorsen et al. 2017; Sépulchre 2018). The development is partly a response to citizens' demands to increased self-determination and greater autonomy over decision-making for support in the community instead of in state-based service provision (cf. van Toorn & Soldatic 2015).

## Disability and technology

Social media activities and internet access through computer and mobile technologies have increased opportunities for people with disabilities to engage in social networks and allowed them to develop in ways not seen before this technology revolution (Barak & Sodovsky 2008; Durkin & Conti-Ramsden 2014; Coyle & Vaughn 2008; Grace et al. 2014; Raghavendra et al. 2015). These activities also allow them to create or switch online identities, where disabilities may have different social meanings than they traditionally have offline. In addition, it has the potential to increase communication opportunities and reduce some of the barriers that people with disabilities often experience when communicating face-to-face in social situations (Lathouwers et al. 2009; Grace et al. 2014; Raghavendra et al. 2015). Therefore, technology and social media activities may foster learning and enhance social status (Baker et al. 2012).

However, as shown by Dobransky & Hargittai (2016), the relationship between disability and the internet includes both challenges and possibilities. While people with disabilities may face barriers to taking advantage of the online world, internet use nonetheless offers many means both to participate in society more fully and to create alternatives to wider exclusion. Consequently, if barriers to online inclusion could be mitigated, people with disabilities would benefit more from new technologies and social media platforms. If barriers persist, the risk of further exclusion and marginalization is apparent, as information technologies and internet use have become increasingly important in contemporary society (Moser 2006; Grace et al. 2014). However, as pointed out by Dobransky & Hargittai (2016), experiences of online exclusion among people with disabilities are not uniform, not least given the wide variety of disabilities and needs among individuals given the label 'people with disabilities'. For example people with hearing

impairment and people with limited walking ability were not significantly less likely to use the internet, while people with visual impairment, people reporting difficulty in leaving the home and people experiencing difficulty in typing were significantly less likely to engage in online activities than those without such disabilities (Dobransky & Hargittai 2016). According to Pinchevksi and Peters (2015), the internet may be beneficial for people with autistic spectrum disorders, as it provides an alternate mode of texting, typing and mediated talk, stripped of both verbal and non-verbal complexities. In addition to this variety of disability experiences, Lathouwers et al. (2009) and Newman et al. (2016) call for more critical research to investigate the needs of users and barriers to information technology with sub-groups related to age (young, adult, old). Ellis and Kent (2011) similarly call attention to the risk of a digital divide: normative assumptions about the able body are embedded in the technologies and might cause a lack of accessibility for certain groups of people with disabilities (see also Goggin 2018). Our online activities, not least though the mobile web, influences 'the relationship between our bodies and the way we navigate the world' (Ellis and Kent 2011: 142), which calls for a need to revise standards and accessibility in digital design. A Swedish study (Ramsten 2018) suggests that structural lack of support, moral values, organizational technologies and cultural differences based on age and gender are all factors that potentially make people with intellectual disabilities the most marginalized sub-group amongst people with disabilities generally, in relation to internet use and social media activities (se also Parsons et al. 2008; Chadwick 2013; Sallafrangue-St. Louis & Normand 2017).

# Negotiating power online

Movements such as the Arab spring (cf. Howard et al 2011; Khondker 2011), citizen journalism (Allan 2009; Hayes, Singer & Ceppos 2007), indigenous struggles against colonial power (Cocq 2015; Lindgren & Cocq 2016) or patients' attitudes in relation to health institutions (Johansson 2013; Goldstein 2015) are some examples of where digital tools and social media are used to raise awareness about alternative narratives. This view has also been applied to people with disabilities, whose voices are too often marginalized in relation to the majority society (cf. Chadwick, Wesson & Fullwood 2013). Actors other than the established ones gain visibility; thereby, alternative narratives emerge, and through a click, ideas and actions can easily become public (Lievrouw 2011; Hill 2013) in a 'public sphere' (compare with, for example, Habermas' (1989) notion of the public sphere). Through the internet, these ideas can be picked up, distributed and discussed and ideally have an impact on the public (offline) debate, thereby making marginalized voices heard. As pointed out by Baker et al. (2012), communication-oriented internet technologies and activities have become an important component for citizens, not least as a link between citizens and the community and the professional world (cf. Baker et al. 2012; Hampton et al. 2011). Hence, the internet and social media are indeed great tools for negotiating power in relation to established structures, but there are other intervening and conflicting structures at hand at the same time. All are parts of an intrinsic web of relations that has to be accounted for. This notion has led some social media researchers to suggest that assumptions about an emancipatory internet need to be revised somewhat (cf. Dean 2003; Gelfgren 2017; Hindman 2009; Morozov 2011). This is perhaps more apparent in relation to people with disabilities. Research has indicated that the intersection of social media and people with disabilities is often attributed to ambiguous reasoning. On the one hand, it involves questions about accessibility and the usability of new media and technologies, on the other, it concerns questions of whether social media activities and internet technologies are barriers or enablers to social inclusion and participation (Kaplan et al. 2006; Bricout et al. 2010; Baker et al. 2012).

At least in part, this ambiguity can be seen as related to perceptions of disability. In Sweden, as in many other countries, the social (relative) model of disability has been predominant in recent decades. This means that the physical and social environment is important to explain disability experiences (Ineland, Molin & Sauer 2013). Hence, 'disabled' is not something one *is* but something one *becomes* — disability is situational and sited in specific ways and areas (Moser 2006). In relation to internet use and social media activities, the notion of disabilities as primarily (but not only) social in character raises a number of important questions for research. First, it involves questions about how people become 'disabled' in practice and what role technologies and remote communication initiatives (see e.g., Buchholza et al. 2018) play in enabling and or disabling interactions. Second, it also includes questions about what is made of people with disabilities as subject and body and what positions, capacities and competences may be achieved through the mobilization of technologies. Third, there are questions about the limits to power and productivity of technologies (e.g., to what extent can the mobilization of technologies open up positions of agency and subjectivity in the everyday lives and interactions among people with disabilities?) (see Moser 2006: 374 ff.).

# **Data and Methods**

For this article, we chose to study the Twitter hashtag (#) funkpol. The term consists of a combination of the words funktion (functionality) and politik (policies) and refers to policies related to functionality/disabilities. In Sweden, the hashtag 'funkpol' is the primary hashtag used for discussing public topics related to disabilities and disability policy. The tag is also used on, for example, Facebook and Instagram, although to a far greater extent on Twitter, which motivates our choice to focus on this specific social media platform. According to statistics from 2016, when the data was collected, Facebook was the most used social medium in Sweden. Twitter is not the most commonly used social medium among people in general, but it is strong in certain groups, among them policy-makers and the media

(*Svenskarna och internet* 2016). Therefore, when the aim is to study public opinion, politics and power, we believe Twitter is a relevant channel to study.

Twitter is an online platform for sending and receiving short messages (called tweets) of up to 140 characters (until November 2017, thereafter 280 characters). You can follow other people as well as be followed by others, but following does not have to be mutual (as compared to Facebook or Snapchat, for example). In a tweet, one can address another account by writing the addressee's username. It is also possible to re-circulate ('retweet') a message, for instance because you consider it is important for others to read and thus wish to share it with your followers. Tweets can be sorted and labelled through the use of hashtags (now common also among other social media) (i.e., keywords that function as a sorting device and that users can choose to follow).

The dataset in this study includes published messages applying the hashtag #funkpol. With the help of a scripted Google spreadsheet, we set up a personal archive and started retrieving tweets. Over the course of 6 months in 2015, we compiled an archive of approximately 10,000 tweets sent from 1,803 different twitter accounts. For further analysis, we decided to include accounts that had posted five times or more – and this limitation resulted in 298 accounts.

In this study, the contents of the tweets are not in focus, because it is the relation between the twitterers that is of interest. Neither individual twitterers nor the content of their tweets are mentioned. It is, therefore, not possible to trace tweets back to individuals (i.e., the data has been collected and analysed with respect to the issues of confidentiality and anonymity of the users). The research complies with the ethical principles of research in the humanities and social sciences according to the codex of the Swedish Research Council (Codex 2011) and was reviewed by the regional board for vetting in Umeå (reference number 2018/1303–1) according to the Act concerning the Ethical Review of Research Involving Humans (SFS, 2003:460).

First, we divided the 298 accounts into different categories based on their Twitter biography. Each Twitter account comes with the possibility to write a 160-character long presentation. For this study, and for the characterization of the accounts, we read the presentations in the bios and divided the whole group into nine different categories. Accounts associated with certain sectors or groups were early discernible – such as companies, political actors, advocacy organizations, media, public authorities and agencies. Accounts held by different persons were more difficult to characterise, but after working with different categories we decided to divide those who present themselves as having a personal experience of disabilities from those who present themselves in relation to a professional title, thus giving us two more categories – individuals and professionals:

- 1. Individual accounts including both users with their own experience of disabilities and users who live in close contact with someone with disabilities (mainly relatives).
- 2. Professionals (e.g., teachers, social workers, academics, psychologists) tweeting from their professional position.
- 3. Companies and corporations oriented towards disability products and interests.
- 4. Political actors including both political parties and their representatives.
- 5. Advocacy organizations organizations that represent the interests of people with disabilities and speak on their behalf.
- 6. Media and their representatives.
- 7. Public authorities.
- 8. Agencies and associations.
- 9. Others not possible to categorize from their bios or lacking bios.

Second, we ran the dataset composed of the tweets through the co-occurrence program *Textometrica* (Lindgren & Palm 2011) so as to detect co-occurrences of the accounts within the separate tweets. Here, we were interested in how and to what extent user accounts co-occur with each other (i.e., who addresses whom, and who is retweeted by whom, in order to get an understanding of the network of twitterers and how senders, receivers and retweets relate to each other). This will be described and analysed in the findings section below.

There are three different ways a user name can be used in a tweet. First, there are senders (i.e., those who write and post a tweet). Second, there are the receivers (i.e., those who are addressed in a tweet). Third, there are those whose tweets are retweeted (i.e., tweets that are picked up and re-sent to followers).

Taking into account the different ways in which a user name appears in a tweet, it is possible to draw a number of conclusions. Someone who tweets a lot, with or without addressing someone else, is indeed active, but this does not reveal whether that particular account is listened to and hence can be seen as having a significant impact. A receiver is someone from whom the sender wants attention. If a sender directs tweets to a specific receiver but the receiver does not reply or is not active, this indicates that the attention wanted is not publicly responded to. A tweet that is retweeted is obviously something someone wants to be distributed to a wider audience and also is a way of showing the original tweeter that the content is of importance.

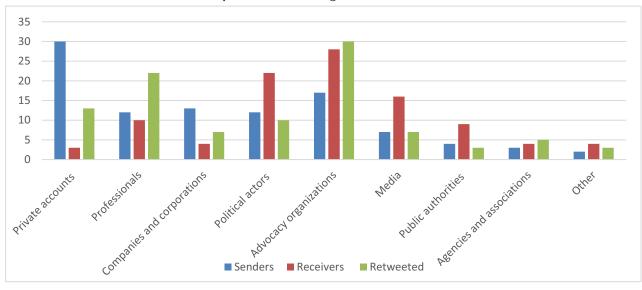
Determining influence on Twitter is complicated, but most models take interaction into consideration. As Riquelme and González-Cantergiani (2016) conclude in their overview of influence on Twitter, 'we can see that almost all

popularity measures are associated with follow-up relationships, while most activity measures consider actions of replies. In turn, for influence measures we highlight the use of retweets' (22). So someone who is tweeting a lot but is not responded to is likely considered to be less influential then someone who tweets less but is responded to through replies or retweets.

# Activity and interaction between accounts

Our data consists, as mentioned above, of approximately 10,000 tweets published by 1,803 different Twitter accounts. Among the senders, we included fairly active twitterers – those who posted five or more tweets over the course of six months. This resulted in 298 accounts, which were categorized and included for analysis. The analysis of the dataset focuses on the network of twitterers and the relation between sending, receiving and retweeting as a matter of influence. **Table 1** provides an overview of activities on #funkpol. It suggests an unequal balance between senders, receivers and those retweeted: the most active senders are not as actively responded to when in terms of interaction – that is receiving answers and having their tweets retweeted.

Twitterers within the category 1 individual accounts (those with a personal experience of being disabled or having a close relative with disability) are the most active when it comes to sending tweets labelled with the funkpol tag, but they score lowest as receivers and are not retweeted to the same degree as other categories. Instead, the overview suggests that political actors, advocacy organizations and the media (categories 4, 5 and 6) are more influential in terms of interaction and are given a more prominent position in the discussions, even though they are less active. Summing up, the most active senders (those in the category 1 individual accounts) are not the same as those who are interacted with as receivers, and their tweets are not retweeted to the same degree as tweets related to organizations, the media and politics. Next, we will have a closer look at the senders, receivers and retweets for each category.



**Table 1:** Overview of activities on #funkpol in different categories.

**Table 2:** Percentage of tweets sent by each category.

Individual accounts	30%
Advocacy organizations	17%
Companies and corporations	13%
Political actors	12%
Professionals	12%
Media actors	7%
Public authorities	4%
Agencies and associations	3%
Other	2%

#### Senders

As shown in **Table 2**, individual accounts are the most frequent twitterers, and they posted approximately 30% of all tweets. The majority of tweets (53%) in this category were sent by people who presented themselves (in their biographical information) as people with various disabilities and/or people who explicitly articulate themselves as activists. The rest were sent by parents and relatives (47%). In addition, a simple count of the tweets sent by each user shows that a limited number of accounts published a majority of tweets, while the majority of twitterers have been rather inactive. As many as 1,085 twitterers published one single tweet, and 1,546 published up to five tweets. The top 10 twitterers published 25% of all tweets (2,468), and the top 20 twitterers published 35% of all tweets (3,427).

The second most active category of senders was category 5: advocacy organizations. They published 17% of all tweets, evenly distributed by official accounts (e.g., disability organizations and associations and individual accounts from chairpersons and representatives of various disability organizations and associations). Companies and corporations – official accounts or representatives – sent 13% of all tweets, followed by both the category 4 political actors (parties and politicians) and the category 2 professionals (i.e., individuals who present themselves as professionals – academics, lawyers, social workers, etc. – in their biographical information) (12% each). Category 6 media actors (TV, radio, magazines) published 7% of the tweets, 4% by category 7 public authorities (e.g., the Ministry of Health and Social Affairs and Secretary of State), and 3% by category 8 agencies and associations. The last 2% could not be categorized. That gives us the following list of senders.

#### Receivers

In terms of influence and impact, it is not only the number of posts that matters, but also the quality and informative nature of the tweets and to what extent one is addressed as a receiver of information and posts, that is to say accounts addressed in a tweet. Our analysis shows that the most active senders are not the same as the receivers. While individual accounts were most active among senders, advocacy organizations (28%) were most frequently addressed as receivers (as shown in **Table 3**). This category is composed of official accounts of disability organizations and associations (71% of all the tweets within this category) and accounts from chairpersons and representatives of disability organizations and associations (29% within this category).

In comparison, the category individual accounts, including people with disabilities and their relatives, were only addressed in 3% of all tweets. Instead, together with advocacy organizations, both media (16%) and political actors (22%) appear to be a prioritized category of addressees. Accounts presented as professionals in their biography (category 2) received 10% of all tweets, and public authorities (category 7) (e.g., National Agency for Special Needs Education and Schools (SPSM), Swedish Agency for Participation (MFD)), received 9% of all tweets. Category 3 companies and corporations received 4% of tweets. That gives us the following list of receivers.

## Retweets

The retweet function means that senders can post other senders' tweets from their own account and thereby share them with their own followers. Retweets are used to make a reference to content from other media and/or to paraphrase others' tweets. Therefore, retweets indicate influence within a field.

If an account is often retweeted, this tends to indicate support and influence (cf. Riquelme & González-Cantergiani 2016). Our analysis shows that advocacy organizations – both the official accounts of the actual organization and accounts from their representatives – published the most retweeted tweets during our data collection (that is 30% of all the retweeted tweets – see **Table 4**). Tweets from professionals were the second most retweeted category (22%), followed by individual accounts (13%) and political actors (10%).

Tweets from categories 6, 3 and 8 (i.e., media actors, companies/corporation and agencies/associations) received relatively few retweets in comparison (7%, 7% and 5%, respectively). Public authorities (category 7) were retweeted 3% and others (category 9) 3%, respectively. That gives us the following list of retweets.

**Table 3:** Percentage of tweets received by each category.

Advocacy organizations	28%
Political actors	22%
Media actors	16%
Professionals	10%
Public authorities	9%
Agencies and associations	4%
Companies and corporations	4%
Individual accounts	3%
Other	4%

**Table 4:** Percentage of retweeted tweets for each category.

Advocacy organizations	30%
Professionals	22%
Individual accounts	13%
Political actors	10%
Media actors	7%
Companies and corporations	7%
Agencies and associations	5%
Public authorities	3%
Other	3%

## Patterns between senders, receivers and retweets

It is relevant to focus on what kind of patterns emerge when comparing the different kinds of tweets (sent, received and retweets) with the nine different categories of accounts that sent, received and were retweeted. As mentioned previously, a high degree of sent tweets means a high degree of activity by the sender but does not indicate to what extent the sender has been listened to or whether the sender has made any kind of impact.

The most interesting pattern emerges when comparing categories 1, 5 and 4 (i.e., the individual accounts, the advocacy organizations and their official representatives and accounts representing political actors). These accounts and the patterns of interaction between them tell us something about how to view the use of Twitter in relation to participation and power in the field of disability.

Advocacy organizations, which are organizations speaking on behalf of their members, belong to one of the most active categories in our data in all the kinds of tweets. These organizations and their representatives are the second most active category among the senders (17%) and the most often addressed among both receivers (28%) and retweets (30%). Looking at individual accounts, they send 30% of all tweets, but this category makes up to 13% of the retweets, and only 3% are addressed in the receiving column, which can be compared to 28% for advocacy organizations, 22% for political actors and 16% for media actors. Hence, people with disabilities and their relatives are frequent twitterers, but their accounts and tweets are only picked up and further distributed to a limited degree. Taking their degree of activity into account, our study suggests that their impact is limited in the discussion taking place on Twitter.

When talking about influence and the negotiation of power structures in the public debate, it is relevant to note the pattern between the different kinds of tweets for the political actors and to analyse them in relation to the individual accounts. Regarding the degree of activity of political actors when sending tweets, they end up in fourth place, with only 12% of sent tweets, by far outnumbered by the individual account category. However, when we look at received tweets, political actors are addressed by 22% of the tweets with an addressed receiver, making them the second largest category among the receivers. Moreover, when looking at retweets, the political actors' tweets comprise 10% of the retweets, making this the fourth largest category.

The fourth category we want to highlight is the media category and their role in this debate. Media actors are the sixth most active group among the senders (7%), the third most often addressed among the receivers (16%) and the fifth largest among the retweeted (7%), suggesting that this is a category that other tweeters intend to reach out to.

Among the other categories, the volume of tweets and fluctuations between the types of tweet are rather small, and their impact must be considered rather limited. They appear to have less influence in terms of participation and power. However, we note that companies are rather active among senders, but that is (we assume, but have not followed up on) more a matter of a marketing strategy than being an active part in the debate.

## Influence is rooted in institutional power

As mentioned at the beginning of this article, much research supports the notion that social media activities have the potential to benefit people with disabilities in a wide range of ways. However, previous research also indicates the intersection of social media and people with disabilities is often attributed to ambiguous reasoning. On the one hand, it involves questions about accessibility and usability of new media and technologies, and on the other, it concerns questions of whether social media activities and internet technologies are barriers or enablers to social inclusion and participation (Kaplan et al. 2006; Bricout et al. 2010; Baker et al. 2012). Another recurring question has also concerned to what extent the internet and social media activities hold the potential to raise awareness, air alternative narratives and empower people with disabilities.

This present study gives us grounds to discuss how and to what extent it is possible to claim the digital media constitutes a tool and a means for negotiating power structures for people with disabilities. By analysing communication patterns on the hashtag #funkpol, our research focus was primarily on the extent to which a social media service like Twitter can give people with disabilities a place in the public debate or whether there are other structures in place holding back

the potential disruptive power of social media. How should the communicative patterns on #funkpol be interpreted in terms of participation for people with disabilities? What does it tell us about disabled people's engagements in social media? As we indicate in this study, what happens online is connected to established structures offline, also in terms of power.

Before discussing the main contributions of this article, it is important to address some limitations of the study. First, it needs to be acknowledged that the wide variety of disabilities and individual needs associated with gender, age, geographical location (e.g., urban/rural) and so forth have a significant impact on experiences of inclusion and exclusion on the internet and social media platforms. Our study – and our interest in negotiation of authority in the public debate – has not been able to differentiate between these socio-demographical aspects. Second, the nature of different social media platforms (Instagram, Twitter, Facebook, etc.) most certainly attract people with different agendas and purposes. Some are more suited to airing voices, raising awareness, engaging in social contexts and empowering people with disabilities. Twitter is not the most widely used social media platform, but considering the research aim in this article – public opinion, policies and power – we claim Twitter is a relevant media to study. Among the most influential accounts on Swedish Twitter 2016, we find politicians, individual journalists, media houses, sports and entertainment celebrities, and so forth (MedieAkademiens Twitterbarometer 2016).

Hence, more social media research on disabilities, power structures and authority are needed that take into account demographical statistics of respondents and how different platforms and online activities relate to these concepts. Comparative analysis may be relevant in these matters.

One main contribution in this article, focusing on one well-established social media platform (Twitter), is that the findings enable us to reconsider and revise claims that social media per se contribute to a democratization of the public debate among people with disabilities. Instead, findings strongly suggest that influence and authority are rooted in already established institutional power. Based on the biographical information of the Twitter profiles, it is apparent that the most active twitterers are certainly people with experience of disabilities, either personally or as a relative of a person with a disability. However, their voices are not picked up or amplified by others in proportion to their activity. They are not addressed or retweeted to the extent one might expect given the frequency of the tweets. The network of different categories of twitterers, and their different forms of activities within the funkpol discussion, suggests that the voices of the individual (and often marginalized) accounts are aired but not really listened to. Consequently, it is not enough to have a platform for discussion or for airing your own experience: the communicative pattern observed in this study suggests that you also need an institutional position in order possibly to have an impact. There are probably individual exceptions of social media influencers (cf. Khamis, Ang & Welling 2017) in the field of disability, outside the established power structures, not visible in this broad study. Such examples seem to be rare in this case and might come out in another kind of study.

Another main finding is that groups with more established power, advocacy groups, politicians and media, are in the top three in terms of impact. Advocacy groups and their representatives are addressed and retweeted to a higher degree than their activity as senders implies. Politicians are also more often addressed than what their activity as senders suggests. The same pattern is seen within the media category, whose Twitter activity is rather scarce in terms of senders within the #funkpol hashtag but whose accounts in this category are referred to, retweeted and also addressed. Categories in which power traditionally resides, offline and online, are those who are addressed and reached out to and from whom active twitterers seek attention. In this case study, the most active twitterers – the individual twitterers closely related to experiences of disabilities – reach out to the established power (advocacy organizations, politicians and media), but these instances do not respond to the same extent as they are addressed – at least not directly on Twitter – according to the patterns visible in this study. Hence, although technology and social media activities may foster learning and enhance social status (Baker et al. 2012), the ambiguity in the intersection of disability and social media calls for nuanced images on the empowering potentials of social media. In relation to people with disabilities, it involves questions about accessibility and usability, as well as whether social media activities and internet technologies are barriers or enablers to social inclusion and participation (Kaplan et al. 2006; Bricout et al. 2010; Baker et al. 2012).

Finally, we find that it is especially interesting to highlight the category professionals as actors who use their combination of profession and personal experience to reach a wider audience. This is in fact the group that might contribute to challenging and negotiating established power structures. At the same time, they rely and draw on their position as professionals. Their authoritative position is based on a combination of professional authority, experience and competence. This category is also quite often retweeted (22%). In terms of impact, professionals, together with actors within established structures – advocacy organizations, political actors, and media – are still strong in the public debate taking place on Twitter. Even though power can be negotiated online through making heard the voices of the unheard, much tends to point in a direction where offline power structures are intertwined with the online structures. There are 'plenty of formal and informal barriers that hinder ordinary citizens' ability to reach an audience' according to Hindman (2009). And this study suggests that the possible democratizing effects of digital media for people with disabilities has to be qualified. It highlights the need to take offline structures and power relations into account when dealing with the process in which power is renegotiated and redistributed to the benefit of marginalized groups and individuals and thereby linked to participation in collective decisions and public discourses (cf. Servaes 1999, 2000; Wilkins 2000) – in relation to disabilities and disability policies.

#### Conclusion

This article is based on the source material from one specific Twitter hashtag – #funkpol – which is the main hashtag for discussing matters related to politics and disabilities in Sweden. The material was collected over the course of 6 months in 2015 and comprises approximately 10,000 tweets. For this article, the network of twitterers was of particular interest to reveal the relations and the power structures between the different actors.

By mapping and categorizing communication patterns between categories of users, it appears that established (offline) power structures are also in place online. Twitterers categorized as 'individuals' (i.e., people without any other power position) are the most active in the debate in terms of the number of tweets, but in terms of influence advocacy organizations, politics and the media still have a stronger position. Twitter does not change that in this context

Previous research suggests that social media (in general) might create a feeling of belonging and be identity-strengthening. From this perspective, Twitter as a network and a channel for communication might have a valuable role for marginalized voices. However, it is reasonable to assume that other forms of social media, such as Instagram, Snapchat and Facebook, more than Twitter (where the presence of specific groups or users and actions indicate political interest and activities) make it easier for people with disabilities to receive social rewards and benefits from their online networks.

This study revises the assumption that digital media in general, and social media in particular, empower marginalized groups and can be part of a democratization process promoting participation and negotiation of power structures on a political level. Our analysis of this specific data shows this was not the case and indicates that, on the contrary, power structures and the distribution of power that exist offline are maintained on Twitter. Nonetheless, digital and social media cannot be approached as contributing to a process of empowerment for marginalized groups with an uncritical eye. As the findings in this study indicate, social media can, in fact, be an arena where established structures are supported and consolidated.

Consequently, there is a need to differentiate between different social media in relation to a discussion on disability and empowerment and participation. In line with, for example, Ellison et al. (2014), we suggest that more research is needed that analyses disabilities in relation to different social media platforms. We therefore welcome further research on the topic that would address the heterogeneity of disabilities and the prerequisites and consequences for various groups in relation to different forms of digital technologies.

# **Competing Interests**

The authors have no competing interests to declare.

# Acknlowledgements

This study is part of a larger project headed by Lotta Vikström, Professor of History, Department of Philosophical, Historical and Religious Studies, Centre for Demographic and Ageing Research (CEDAR), Umeå University, Sweden. The project is funded by the European Research Council (ERC) under the European Union's Horizon 2020 Research and Innovation Program (Grant Agreement No. 647125), "DISLIFE Liveable Disabilities: Life Courses and Opportunity Structures Across Time." The present study is also part of another project led by Professor Vikström; "Experiences of Disabilities in Life and Online: Life Course Perspectives on Disabled People from Past Society to Present." The project is funded by the Wallenberg Foundation (Stiftelsen Marcus och Amalia Wallenbergs Minnesfond) [Grant agreement 2012.0141.]

### References

- Allan, Stuart. 2009. "Histories of citizen journalism." In *Citizen Journalism*, edited by Stuart Allen, and Einar, Thorsen, 17–31, New York: Peter Lang.
- Barak, Azy, and Yael Sadovsky. 2008. "Internet use and personal empowerment of hearing-impaired adolescents." *Computers in Human Behavior* 24: 1802–1815. DOI: https://doi.org/10.1016/j.chb.2008.02.007
- Buchholz, Margret, U. Ferm, and Kristina Holmgren. 2018. "Support persons' views on remote communication and social media for people with communicative and cognitive disabilities." *Disability and Rehabilitation*. DOI: https://doi.org/10.1080/09638288.2018.1529827
- Caron, Jessica, and Janice Light. 2016. "Social Media has opened a World of 'Open communication:' Experiences of adults with cerebral palsy who use augmentative and alternative communication and social media." *Augmentative and Alternative Communication* 32: 25–40. DOI: https://doi.org/10.1111/j.1083-6101.2007.00362.x
- Castells, Manuel. 2003. *The Internet galaxy: Reflections on the Internet, business, and society.* Oxford: Oxford University Press.
- Chadwick, Darren, Caroline Wesson, and Chris Fullwood. 2013. "Internet access by people with intellectual disabilities: Inequalities and opportunities." *Future Internet* 5: 376–397. DOI: https://doi.org/10.3390/fi5030376
- Cocq, Coppélie. 2015. "Indigenous voices on the web: Folksonomies and Endangered Languages." *Journal of American Folklore* 128(509): 273–285. DOI: https://doi.org/10.5406/jamerfolk.128.509.0273

- CODEX. 2011. "Etiska regler och riktlinjer för forskning" [Ethical rules and guidelines for research]. Vetenskapsrådet, Uppsala University. Retrieved from http://www.codex.vr.se/.
- Coyle, Cheryl L., and Heather Vaughn. 2008. "Social networking: communication revolution or evolution?" *Bell Labs Technical Journal* 13(2): 13–17. DOI: https://doi.org/10.1002/bltj.20298
- Dean, Jodi. 2003. "Why the Net Is Not a Public Sphere." *Constellations* 10(1): 95–112. March. DOI: https://doi.org/10.1111/1467-8675.00315
- Dobransky, Kerry, and Eszter Hargittai. 2016. "Unrealized potential: exploring the digital disability divide." In *Poetics* 58: 18–28. DOI: https://doi.org/10.1016/j.poetic.2016.08.003
- Durkin, Kevin, and Gina Conti-Ramsden. 2014. "Turn off or tune in? What advice can SLTs, educational psychologists and teachers provide about uses of new media and children with language impairments?" *Child Language, Teaching and Therapy* 30: 187–205. DOI: https://doi.org/10.1177/0265659013511471
- Ellis, Katie, and Mike Kent. 2011. *Disability and New Media*. London: Routledge. DOI: https://doi.org/10.4324/9780203831915
- Ellison, Nicole, Cliff Lampe, Charles Steinfield, and Jessica Vitak. 2010. "With a little help from my friends: Social network sites and social capital." In *The Networked Self: Identity, Community and Culture on Social Network Sites*, edited by Zizi Papacharissi, 124–145. New York: Routledge.
- Ellison, Nicole, Jessica Vitak, Rebecca Gray, and Cliff Lampe. 2014. "Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes." *Journal of Computer-Mediated Communication* 19(4): 855–870. DOI: https://doi.org/10.1111/jcc4.12078
- Gelfgren, Stefan. 2017. "The dyophysite nature of internet: Negotiating authorities within institutionalized Christianity." *Cultural Analysis* 16(1): 83–100.
- Goggin, Gerard. 2018. "Disability and digital inequalities: Rethinking digital divides with disability theory." In *Theorizing Digital Divides*, edited by Massimo Ragnedda, and Glenn Muschert, 63–74. London and New York: Routledge. DOI: https://doi.org/10.4324/9781315455334-6
- Goggin, Gerard, Scott Hollier, and Wayne Hawkins. 2017. "Internet accessibility and disability policy: Lessons for digital inclusion from Australia." *Journal of Internet Regulation* 6(1): 1–18.
- Goldstein, Diane. 2015. "Vernacular Turns: Narrative, Local Knowledge, and the Changed Context of Folklore." *The Journal of American Folklore* 128(508): 125–145. DOI: https://doi.org/10.5406/jamerfolk.128.508.0125
- Grace, Emma, Parimala Raghavendra, Lareen Newman, Denise Wood, and Tim Connell. 2014. "Learning to use the Internet and on-line social media: What is the effectiveness of home-based intervention for youth with complex communication needs?" *Child Language Teaching and Therapy* 30: 141–157. DOI: https://doi.org/10.1177/0265659013518565
- Habermas, Jürgen. 1989. *The structural transformation of the public sphere: An inquiry into a category of bourgeois society.* Cambridge, Mass.: MIT Press.
- Haller, Beth. 2010. Representing Disability in an Ableist World: Essays on Mass Media. Louisville, KY: The Advocado Press.
- Halvorsen, Rune, Björn Hvinden, Julie Beadle Brown, Mario Biggeri, Jan Tössebro, and Anne Waldschmidt. 2017. *Understanding the lived experiences of persons with disabilities in nine countries: Active Citizenship and Disability in Europe* (2nd volume). London: Routledge. DOI: https://doi.org/10.4324/9781315623924
- Hampton, Keith, Lauren Sessions Goulet, Lee Rainie, and Kristen Purcell. 2011. "Social networking sites and our lives." Washington, DC: Pew Internet & American Life Project.
- Hayes, Arthur S., Jane B. Singer, and Jerry Ceppos. 2007. "Shifting Roles, Enduring Values: The Credible Journalist in a Digital Age." *Journal of Mass Media Ethics* 22(4): 262–279. DOI: https://doi.org/10.1080/0890052070 1583545
- Hill, Simon. 2013. Digital Revolutions: Activism in the Internet Age. Oxford: New Internationalist.
- Hindman, Matthew. 2009. *The Myth of Digital Democracy*. Princeton: Princeton University Press. DOI: https://doi.org/10.1515/9781400837496
- Howard, Philip N., Aiden Duffy, Deen Freelon, Muzammil M. Hussain, Will Mari, and Marwa Mazaid. 2011. *Opening closed regimes: What was the role of social media during the Arab Spring?* Seattle: University of Washington, Project on Information Technology and Political Islam. Available at SSRN: https://ssrn.com/abstract=2595096. DOI: https://doi.org/10.2139/ssrn.2595096
- Ineland, Jens. 2016. "Hybrid structures and cultural diversity in welfare services for people with intellectual disabilities. The case of inclusive education and disability arts in Sweden." *ALTER, European Journal of Disability Research* 10(4): 289–300. DOI: https://doi.org/10.1016/j.alter.2016.06.002
- Ineland, Jens, and Jan Hjelte. 2017. "Knowing, being or doing? A comparative study on human service professionals' perceptions of quality in day-to-day encounters with clients with intellectual disabilities." *Journal of Intellectual Disabilities* 22(3): 246–261. 2018. DOI: https://doi.org/10.1177/1744629517694705
- Jenkins, Henry. 2006. Convergence culture: Where old and new media collide. New York: New York University Press.
- Johansson, Anna. 2013. "'Låt dom aldrig slå ner dig.': Bloggen som arena för patientaktivism." *Socialvetenskaplig tidskrift*, 3–4, 203–221.

- Johnson, Mark. 2019. "Inclusion and exclusion in the digital economy: Disability and mental health as a live streamer on Twitch.tv." *Information, Communication & Society* 22(4): 506–520. DOI: https://doi.org/10.1080/13691 18X.2018.1476575
- Khamis, Susie, Lawrence Ang, and Raymond Welling. 2017. "Self-branding, 'micro-celebrity' and the rise of Social Media Influencers." *Celebrity Studies* 8(2): 191–208. DOI: https://doi.org/10.1080/19392397.2016.1218292
- Khondker, Habibul Hague. 2011. "Role of the New Media in the Arab Spring." *Globalization* 8(5): 675–679. DOI: https://doi.org/10.1080/14747731.2011.621287
- Lathouwers, Karen, Jan de Moor, and Robert Didden. 2009. "Access to and use of Internet by adolescents who have a physical disability: A comparative study." *Research In Developmental Disabilities* 30(4): 702–711. DOI: https://doi.org/10.1016/j.ridd.2008.09.003
- Lievrouw, Leah. 2011. Alternative and Activist New Media. Cambridge: Polity Press.
- Lindgren, Simon, and Coppélie Cocq. 2016. "Turning the Inside Out: Social Media and the Broadcasting of Indigenous Discourse". *European Journal of Communication* 32(2): 131–150. DOI: https://doi.org/10.1177/0267323116674112
- Lindgren, Simon, and Fredrik Palm. 2011. *Textometrica service package*. Retrieved from http://textometrica.humlab.umu.se/.
- MedieAkademiens Twitterbarometer. 2016. accessible at https://medieakademien.se/wp-content/uploads/2019/03/2016\_Medieakademin\_Twitterbarometern.pdf.
- Molin, Martin, Emma Sorbring, and Lotta Löfgren-Mårtenson. 2015. "Teachers' and parents' views on the Internet and social media usage by pupils with intellectual disabilities." *Journal of Intellectual Disabilities* 19(1): 22–33. DOI: https://doi.org/10.1177/1744629514563558
- Morozov, Evgeny. 2011. The net delusion: The dark side of internet freedom. New York: Public Affairs.
- Moser, Ingunn. 2006. "Disability and the promises of technology: Technology, subjectivity and embodiment within an order of the normal." *Information, Communication & Society* 9(3): 373–395. DOI: https://doi.org/10.1080/13691180600751348
- Palmer Susan, B., Michael L. Wehmeyer, and Daniel K. Davies. 2012. "Family members' reports of the technology use of family members with intellectual and developmental disabilities." *Journal of Intellectual Disability Research* 56(4): 402–414. DOI: https://doi.org/10.1111/j.1365-2788.2011.01489.x
- Parsons, Sarah, Harry Daniels, Jill Porter, and Christopher Robertson. 2008. "Resources, staff beliefs and organizational culture: Factors in the use of information and communication technology for adults with intellectual disabilities." *Journal of Applied Research in Intellectual Disabilities* 21: 19–33.
- Pearson, C., and F. Trevisan. 2015. "Disability activism in the new media ecology: Campaigning strategies in the digital era." *Disability & Society* 30(6): 924–940. DOI: https://doi.org/10.1080/09687599.2015.1051516
- Pinchevski, Amit, and John Durham Peters. 2015. "Autism and new media: Disability between technology and society." *New Media & Society* 18(11): 2507–2523. DOI: https://doi.org/10.1177/1461444815594441
- Raghavendra, Parimala, Lareen Newman, Emma Grace, and Denise Wood. 2013. "'I could never do that before': Effectiveness of a tailored Internet support intervention to increase the social participation of youth with disabilities." *Child Care Health and Development* 39(4): 552–561. DOI: https://doi.org/10.1111/cch.12048
- Raghavendra, Parimala, Lareen Newman, Emma Grace, and Denise Wood. 2015. "Enhancing social participation in young people with communication disabilities living in rural Australia: outcomes of a home-based intervention for using social media." *Disability and Rehabilitation* 37(17): 1576–1590. DOI: https://doi.org/10.3109/096382 88.2015.1052578
- Rainie, Harrison, and Barry Wellman. 2012. *Networked: The New Social Operating System*. Cambridge, Mass.: MIT Press. DOI: https://doi.org/10.7551/mitpress/8358.001.0001
- Rheingold, Howard. 1994. *The Virtual Community: Finding Connection in a Computerized World.* London: Secker & Warburg.
- Riquelme, Fabian, and Pablo González-Cantergiani. 2016. "Measuring user influence on Twitter: A survey." *Information Processing and Management* 52(5): 949–975. DOI: https://doi.org/10.1016/j.ipm.2016.04.003
- Sallafranque-St-Louis, Francois, and Claude L. Normand. 2017. "From solitude to solicitation: How people with intellectual disability or autism spectrum disorder use the internet." *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 11(1/7). DOI: https://doi.org/10.5817/CP2017-1-7
- Scholz, Frederike, Betul Yalcin, and Marc Priestley. 2017. "Internet access for disabled people: Understanding socio-relational factors in Europe." *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 11(1/4). DOI: https://doi.org/10.5817/CP2017-1-4
- Sépulchre, Marie. 2018. "Tensions and unity in the struggle for citizenship: Swedish disability rights activists claim 'Full Participation! Now!'." *Disability & Society* 33(4): 539–561. DOI: https://doi.org/10.1080/09687599.2018. 1440194
- Servaes, Jan. 1999. Communication for Development: One World, Multiple Cultures. Cresskill, NJ: Hampton Press.
- Servaes, Jan. 2000. Walking on the Other Side of the Information Highway: Communication, Culture and Development in the 21st Century. Penang, Malaysia: Southbound.

- SFS, 1993:387. *Act Concerning Support and Services for Persons with Certain Functional Impairments.* Stockholm: Ministry of Health and Social Affairs.
- SFS, 2003:460. Act Concerning Ethical Review of Research Involving Humans, Stockholm, Ministry of Education.
- Steinfeld, Charles, Nicole B. Ellison, and Cliff Lampe. 2008. "Social capital, self-esteem, and use of online social network sites: a longitudinal analysis." *Journal of Applied Developmental Psychology* 29(6): 434–445. DOI: https://doi.org/10.1016/j.appdev.2008.07.002
- *Svenskarna och internet.* 2016. [The Swedes and the internet], accessible at https://www.iis.se/docs/Svenskarna\_och\_internet 2016.pdf.
- Thackeray, Rosemary, and MaryAnne Hunter. 2010. "Empowering Youth: Use of Technology in Advocacy to Affect Social Change." *Journal of Computer-mediated Communications* 15(4): 575–591. DOI: https://doi.org/10.1111/j.1083-6101.2009.01503.x
- Tossebro, Jan. 2016. "Scandinavian disability policy: From deinstitutionalisation to non-discrimination and beyond." *ALTER, European Journal of Disability Research* 10(2): 111–123. DOI: https://doi.org/10.1016/j.alter.2016.03.003
- United Nations. 2007. *Convention on the Rights of Persons with Disabilities*. Accessed August 16, 2018. https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html.
- van Toorn, Georgia, and Karen Soldatic. 2015. "Disability, rights realization, and welfare provisioning: What is it about Sweden?" *Research and Practice in Intellectual and Developmental Disabilities* 2(2): 109–115. DOI: https://doi.org/10.1080/23297018.2015.1089185
- Wilkins, Karin G. 2000. *Redeveloping Communication for Social Change: Theory, Practice and Power.* Lanham, MD: Rowman and Littlefield.

How to cite this article: Ineland, Jens, Stefan Gelfgren, and Coppélie Cocq. (2019). Negotiating Authority: Disability, Interactions and Power Relations on Twitter. *Scandinavian Journal of Disability Research*, 21(1), pp. 238–249. DOI: https://doi.org/10.16993/sjdr.591

Submitted: 29 August 2018 Accepted: 06 September 2019 Published: 24 September 2019

**Copyright:** © 2019 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/4.0/.

