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CLOSER TO THE STORY? ACCESSIBILITY AND MOBILE JOURNALISM

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Table of Contents

A	acknowledgements	3
1	Introduction	4
	What is mobile journalism?	5
	Media companies believe in online video	7
	Transformation into mobile journalism	8
	Background for the research	9
2	A short history of professional mobile journalism	11
	The pioneers of video journalism	11
	Not just journalists	12
	Media convergence and formats of news media	14
	Resistance in newsrooms	15
3	Literature review: Accessibility through mobile journalism	17
	Geographical and physical accessibility	17
	Social interactions and psychological accessibility	23
4	, ,	26
	Geographical and physical accessibility	27
	Social interactions and psychological accessibility	32
5	Comparative field experiment	38
	Methods	38
	Results	41
	Discussion and restrictions	46
6	Conclusions	48
7	List of interviewees	51
8	References	52
L	List of Figures	
1	Figure 1: Which digital funding streams will you be focusing on most in 20	017 7
2		42
3	, , , ,	43
4	Figure 4: 40 years and older (% of age group)	43
5		44
6		45

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1. Introduction

It is autumn 2015. Tens of thousands of refugees are travelling through Europe.

A group of men, women and children are walking along a muddy path somewhere in Macedonia. It is raining. A child is crying. A young boy stares out at the emptiness (Ronzheimer, 2015).

At the same time, thousands of viewers are using their smartphone to watch the migrants who are struggling. Journalist Paul Ronzheimer from Bild is streaming events live on Periscope. He has travelled with the group of Syrian refugees from the Greek island Kos (Dredge, 2015; Scott, 2015). Their final destination is Germany.

The refugee crisis has hit the headlines around Europe. Ronzheimer is not the only journalist who offers information to audiences by utilising the new technology. For example, a reporter from Time magazine is streaming the refugee crisis live on Periscope, and BBC Panorama tries to attract a young audience by providing regular updates on Snapchat (Scott, 2015).

Ronzheimer's live videos attract a high number of viewers. Later, Ronzheimer tells Journalism.co.uk that at times he had 5-6,000 live viewers on Periscope, and one video was viewed 90,000 times (Scott, 2015).

Periscope is Twitter's video application, where people can watch user-generated live footage from all over the world. Interactivity plays an important role in Periscope. Ronzheimer and the refugee group received a lot of questions and comments from viewers. The refugees could tell their stories directly to the audience (Dredge, 2015; Scott, 2015).



Paul Ronzheimer followed refugees and streamed events live on Periscope. Later, Bild turned his footage into a 16-minute-long documentary. You can watch the documentary by clicking on the photo. (Credit: Bild)

Later, Bild turned Ronzheimer's footage into a 16-minute-long documentary for the newspaper's website and Youtube. Ronzheimer said that he had gained greater access to the story by utilising a small smartphone (Scott, 2015). According to Scott, Ronzheimer was able to film in all locations and situations, because he could remain with the refugees throughout the whole journey.

For example, in Serbia, the group was stopped by the police. Ronzheimer thinks that they would have had a problem if a camera crew had been present but, using a smartphone, he was able to film the incident (Scott, 2015). Ronzheimer told the Guardian:

Everybody has smartphones now, so with my small iPhone camera I was able to film without it being obvious that I was media. (Dredge, 2015)

This is the concept that I propose to explore in depth here. Can journalists get closer to the subject or story by utilising mobile journalism? Do people react differently when they are approached by a mobile journalist rather than a multi-person TV crew?

What is mobile journalism?

Over the past few years, there has been a significant increase in the supply and consumption of online videos. Social media companies and media outlets seek to engage audience through videos. Video-on-demand services and video-sharing websites threaten the dominance of traditional television (Nielsen and Sambrook, 2016, p. 3).

One reason behind the rise of online video is mobile technology which has brought online videos into our pockets (Nielsen and Sambrook, 2016, p. 12). Smartphones are better, data are cheaper, and wireless broadband connections are more reliable than ever.

According to the media agency Zenith, consumers around the world spent an average of almost 20 minutes a day viewing online video on smartphones and tablets in 2015 (Oakes, 2016). Zenith forecast that mobile video consumption will reach over 33 minutes a day by 2018.

This growth does not appear likely to end soon. In 2017, the telecommunication company Ericsson (2017, p. 12) estimated that mobile video traffic will grow by around 50 percent annually until 2022.

However, it is worth mentioning that the biggest share of traffic does not belong to news videos – let alone mobile journalism. Ericsson (2017, p. 13) found that Youtube traffic accounted for 40-70 percent of the total video traffic across almost every network that was included in the company's report. In some areas, other video-on-demand platforms, like Netflix, received a 10-20 percent share of the total mobile video traffic (Ericsson, 2017, p. 13).

Mobile technology not only changes how consumers behave. It is also transforming the methods of journalistic work (Briggs, 2016, p. 277). Some specialists have said that mobile technology has sparked a whole 'new era in newsgathering' (Quinn, 2013, p. 213): with

smartphones, journalists can record and edit video and audio, take stills and deliver stories in the field using wireless mobile network.

Technological development has heralded a new form of journalism: mobile journalism. There are plenty of definitions of mobile journalists. It is widely acknowledged that mobile journalists are journalists who work alone in the field using mobile phones for newsgathering.

TV producer, journalist and academic Ivo Burum summarised the definition of mobile journalism in his book (2016) as follows:

It is a holistic form of multimedia storytelling that combines journalism, videography, photography, writing, editing and publishing, all done on a handheld smart device. Story is key in mojo production, and it defines the level and type of mojo that's required. For example, shooting sports or wildlife may require long lenses and a DSLR, or a video camera, in addition to your smartphone. The point is that technology is not the answer to everything, and a focus on story can help determine a level of technology. (Burum, 2016)

In an interview for this research, mobile journalist Nick Garnett from BBC Radio 5 Live admitted that, sometimes, he uses a better quality digital camera for shooting, but still consider this mobile journalism:

People make the mistake that they think that the mobile journalism is about using a mobile phone. It's not. It's about the reporter being mobile. It's about their sense of mind, their ideas, realising that they can do lots of different tasks using technology that you can buy on the high street. (Garnett, Skype interview, 22nd of November 2016)

A visit to the mobile journalism conference MoJoCon in May 2017 revealed that mobile journalists have a great variety of working methods and needs with regard to mobile journalism. One reporter may use mobile journalism to produce traditional broadcast-style video stories, while another may engage in crowdsourcing on Snapchat. Another may use mobile devices for multi-camera live broadcasts, while yet another is filming virtual reality videos. The most talented reporters can do all of this.

Although mobile technology offers a wide variety of possibilities to journalists, in this research we will focus on video. Throughout the research, the term 'mobile journalist' will refer to a journalist who usually works alone and uses a smartphone primarily for filming and editing videos or shooting live videos.

Mobile video journalism was born from video journalism. Video journalists worked alone using small video cameras for newsgathering. Where appropriate, the existing research on video journalism is used in this research.

In news organisations and the former literature, mobile journalists and video journalists could also be called multimedia journalists, one-man-bands, backpack journalists or solo

journalists (Blankenship, 2016, p. 2). In this research, the term 'solo journalist' will refer to a journalist who works alone, utilising either a smartphone or a video camera for newsgathering.

Media companies believe in online video

In recent years, the biggest growth in video data traffic is related to video-on-demand services and video-sharing platforms (Ericsson, 2016, p. 15), but the legacy media companies and new digital media companies have invested strongly in online videos as well (Kalogeropoulos, Cherubini and Newman, 2016, p. 5). There is a strong belief that online videos will prove a good source of income – even though it is usually relatively expensive to produce good video content (Patel, 2016).

Social media platforms Facebook, Twitter, Instagram and Snapchat placed video content 'at the heart of their strategies' in 2016 (Newman, 2017, p. 19). As a result, there has been a huge growth in the supply of videos on social media. In June 2016, Facebook announced that the network would probably be "all video" in five years (Zillman, 2016).

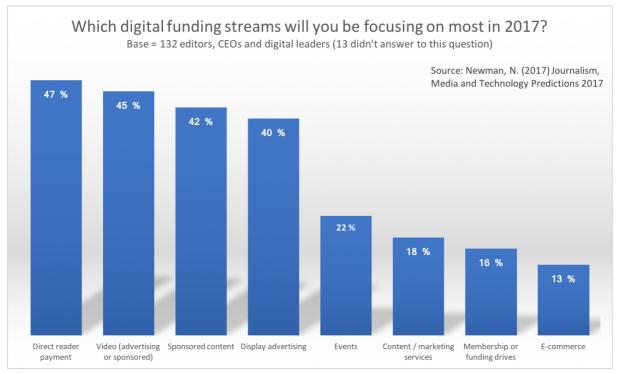


Figure 1.

Despite their investment, legacy media companies have struggled with news videos. According to Kalogeropoulos, Cherubini and Newman (2016, p. 6), most of the growth in online videos has occurred on third-party social media platforms and around softer news or lifestyle videos. They stated that the majority of consumers still prefer text news over video. Nielsen and Sambrook (2016, p. 3) noted that none of the dominant social media platforms or video-on-demand services focuses on news content.

Nevertheless, there is still a strong belief in online video among media companies. The Reuters Institute asked editors, CEOs and digital leaders which digital funding streams they will be focusing most on in 2017. As shown in Figure 1, videos were the second most common answer after direct reader payment: 45 percent of the participants said that they will focus most on video content (Newman, 2017, p. 12).

Transformation into mobile journalism

Over the past few decades, news organisations have adopted mobile journalism in their newsrooms. Either companies have hired multimedia journalists or they have trained existing employees in mobile journalism. For example, in the United States, TV stations are using more multimedia journalists year after year (Papper, 2016b).

One reason for this transformation seems to be purely economic. In previous studies, journalists have reckoned that the main driving force for media companies to hire solo journalists is cost-savings (Blankenship, 2016, p. 56; Heist, 2011, p. 65; Avilés et al., 2004, p. 99).

Some media companies try to save wage costs by turning multi-person crews into video journalists or mobile journalists. Several news directors told Blankenship (2016, p. 56) that they need to hire solo journalists simply because their company needs to reduce its staff expenses.

There is an assumption that newsrooms can produce more content by utilising solo journalists. Managers of news companies have believed this from the early days of video journalism (Wallace, 2009, p. 695). In addition to this supposed growth in output, in the United States, the average salary of a mobile journalist is lower than that of a news reporter (Papper, 2016a).

One news director told Blankenship (2016, p. 57) that, by using solo journalists, the newsroom can expand the coverage area:

For instance, I have a bureau and the budget to staff a reporter and photographer five-days a week. But if I have two [solo journalists], I can cover it seven days a week, which is what we've done. In a competitive landscape, we are 24/7 and one of our competitors only covers that area five days a week and they have a reporter and photographer. The viewers are better off for it because now we're getting double coverage. (Blankenship, 2016, p. 57)

The observation of this increased output and expanded coverage has proved arguable among journalists. The problem is that there exists a general lack of figure-based research on productivity in mobile journalism. A news director told Bock (2009, p. 254) that "the cost savings are illusory". He claimed that a two-person crew can produce two stories in the same time that one video journalist produces one story.

In the report by the Federal Communications Commission (Waldman, 2011, p. 90), Con Psarras, director of KSL-TV in Salt Lake City, admitted that the real reason for the

transformation is entirely economic – according to him, news companies do not achieve greater coverage by hiring solo journalists:

It is an ability to cut heads, and it is a full-time-equivalent-reduction campaign. It does not make the pictures better. It does not make the stories better. It does not make the coverage on the web better – that's a mythology. It just saves money. (Waldman, 2011, p. 90)

However, it is widely acknowledged, that media companies can achieve cost savings with regard to equipment expenses. In the most basic form, a mobile journalist needs only a 100 euro Android phone. To achieve better quality videos, a mobile journalist can use, for example, the following accessories:

- Smartphone with a good camera
- Tripod
- Smartphone rig (holder) / tripod mount
- Microphone
- LED light
- External battery

In 2017, a toolkit like this costs 500-1000 euros, depending on the quality of the mobile phone and other devices. A mobile journalist's kit is far more inexpensive than a professional TV camera, that can cost tens of thousands of euros. Some mobile journalists also use electronic stabilizing gimbals and external lenses to obtain better pictures.

Nowadays, media companies do not have to invest too much in expensive microwave or satellite trucks (Higgins-Dobney and Sussman, 2013, p. 854), because journalists can send videos or stream live footage from a smartphone using a wireless network. Nevertheless, there is still a need for expensive satellite systems, because mobile networks are not always reliable or available.

Background for the research

My interest in this research area developed while I was working as a news editor for the ISTV. This is the web TV of the biggest news site in Finland, www.iltasanomat.fi. In the newsroom, I organised mobile journalism training and tried to adopt mobile journalism in our daily routines. I am also keen to film mobile video stories myself.

This research project began with a broad perspective. First, I tried to work out the advantages and disadvantages of mobile journalism by interviewing four experienced mobile journalists from England, Ireland and the Netherlands.

One interesting feature emerged: the journalists claimed that they can get 'closer to the story' when utilising mobile journalism.

For example, Dutch mobile journalist Geertje Algera stated that she was able to film stories that would have been impossible with a TV camera and a two-person crew.

Finally, I came up with two research questions:

- 1) Can journalists get closer to the story by utilising mobile journalism?
- 2) Do people prefer to give interviews to a mobile journalist rather than a two-person TV crew?

This research is divided into five chapters. The first chapter deals with the history of mobile journalism. We will see how video journalism, the new mobile technology and media convergence engendered mobile journalism.

The second chapter analyses the existing literature on the research theme. Bock (2012, p. 78) divided the accessibility related to video journalism into two dimensions: geographical accessibility and social interaction. In this research, Bock's allocation is used, but physical accessibility is observed with geographical accessibility and psychological accessibility with social interactions.

The third chapter focuses on the experiences of 11 mobile journalists. The data for the chapter were collected using semi-structured interviews.

The fourth chapter attempts to answer directly the second research question. In order to find the answer, a comparative field experiment was organised in a shopping centre in Helsinki.

The fifth chapter concludes the findings of the research. Recommendations for further research will be given as well.

2. A short history of professional mobile journalism

According to Pavlik (1999, p. 54), 'the way journalists work has always been influenced, constrained and structured by technology'. Mobile journalism was born out of the new mobile technology and practices of video journalism.

Video journalism is not a new newsgathering method. So-called one-man-bands have existed in documentary filmmaking for a long time (Bock, 2012, p. 2). Video journalism has been a common practice, especially among the small market TV stations in the United States, for decades (Blankenship, 2016, p. 2).

The existing literature shows that, before solo journalists emerged, it required 2-5 persons to cover a news event for television. A TV crew could consist of a reporter, a camera operator, a sound technician and a light technician. Sometimes, they also needed a field producer (Leff, 2009, p. 637).

At the beginning, there was a physical barrier to the development of solo journalism. A TV camera, a recorder and a battery pack were separate devices and weighed a lot. One journalist could not carry all of those devices unaided.

Smith (2011, p. 8) points out two technological steps towards video journalism. The first ENG (electronic newsgathering) equipment appeared on the market in the 1970s. ENG devices recorded footage on videotape instead of film. However, the first ENG cameras were cumbersome. Mickey Osterreicher from WKBW-TV Buffalo recalled (Smith, 2011, p. 8) how "the camera was powered by a battery belt that resembled weights that scuba divers wear".

In the early 1980s, many journalists began to use Sony's Betacam system. With Betacam, the recorder was built inside the camera and the size of the ENG equipment shrank remarkably (Smith, 2011, p. 8).

The pioneers of video journalism

In the 1970s, American filmmaker Jon Alpert started to film documentaries utilising the new video camera technology. Alpert and his wife, Keiko Tsuno, reported from places that were usually out of reach to western media companies. For example, they were the first Americans who were allowed to film inside Fidel Castro's Cuba and in Vietnam after the war (Christensen, 1986).

According to Smith (2011, p. 8), in the 1980s Alpert 'turned one-man-banding into a TV news art form using cinema vérité style to get up close to people and do stories with angles few others were able to get'. Encyclopedia Britannica (1999) states that cinema vérité is a filming method that shows people in 'everyday situations with authentic dialogue and naturalness of action'. Documentary filmmakers have used this method since the 1960s.

Camera technology developed. In 1988, another pioneer of video journalism, Michael Rosenblum, left his job as a producer for CBS News (Rosenblum, 2007a). Rosenblum

travelled to a Palestinian refugee camp in the Gaza strip and used a small camera to film the events of the Palestinian Intifada (Hemmingway, 2008, p. 77).

In the 1990s, Rosenblum founded a company called Video News International. The concept behind the news network was to provide video cameras for journalists around the world. Rosenblum wrote that, by 1994, he had equipped and trained around 100 video journalists (Rosenblum, 2011). He stated that, in the following year, the New York Times bought the company and turned it into New York Times Television.

Since then, Rosenblum has trained journalists around the world. For example, in the early 2000s, Rosenblum got a three-year contract to train 6,000 BBC employees as video journalists (Hemmingway, 2008, p. 77). In his training sessions, Rosenblum encouraged reporters to use a more 'observational' and 'intimate' style to shoot news stories (Bock, 2009, p. 249).

Rosenblum has criticised the traditional TV news for a long time. In his blog (Rosenblum, 2007b), he wondered why TV news looks similar everywhere in the world: "It's always a guy at a desk with a box over his shoulder," Rosenblum wrote.

Rosenblum (2007b) argued that journalists avoided risks because producing television news has always been expensive. He thought that video journalism was a cheaper and more risk-free way to produce TV news:

It cuts the cost of production by about 50%. It quadruples the number of people in the field. It improves journalism. (Smith, 2011, p. 17)

There is still little published data on the savings that the media companies have achieved by utilising solo journalists. Most figures are just vague estimates.

For example, MSNBC's international editor Preston Mendenhall stated that his two-week journey in Afghanistan as a solo journalist cost \$6,000 in 2002 (Stone, 2002). According to him, it would have cost \$70-80,000 if a four-person crew had done the same.

Not just journalists

One predecessor of mobile journalists was not a journalist at all. The Canadian inventor, and later computer engineering professor at the University of Toronto, Steve Mann started to develop wearables and augmented reality devices in the 1970s. His 'photographic's assistant' system looked like apparatus from a science-fiction movie:

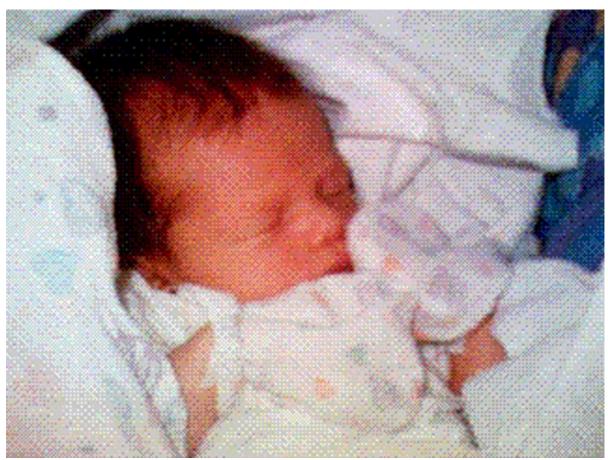
I integrated the computer into a welded-steel frame worn on my shoulders (note belt around my waist which directed much of the weight into my hips). Power converter hung over one shoulder. Antennae (originally 3, later reduced to 2) operating at different frequencies, allowed simultaneous transmission and reception of computer data, voice, or video. This system allowed for complete interaction while walking around doing other things. (Mann, 1997, p. 67)

The WearComp system was complicated. Later, Mann stated that he had to carry 'quite a bit of gear':

Nearly everybody around me thought I was totally loony to wear all that hardware strapped to my head and body. When I was out with it, lots of people crossed the street to avoid me – including some rather unsavory-looking types who probably didn't want to be seen by someone wearing a camera and a bunch of radio antennas! (Mann, 2013)

As the years rolled by, Mann's wearable computer gained new functions. In February 1995, Mann was walking around wearing his apparatus. Suddenly he saw a fire hose and decided to follow it. The WearComp sent hundreds of pictures of the apartment fire to the internet:

As it turned out later, the newspapers had very desperately wanted to get this event covered, but could not reach any of their photojournalists in time to cover the event. The author, however, was able to offer hundreds of pictures of the event, wirelessly transmitted, while the event was still happening. (Mann, 2004, p. 622)



Philippe Kahn took this photo of his newborn daughter in 1997. His self-made camera phone posted the photo automatically on a website. This photo is published with the kind permission of Kahn.

Steve Mann was not the only innovator who tried something new. On June 11 1997, Philippe Kahn's wife Sonia gave birth to a baby girl. Kahn took a photo of the new-born Sophie using a self-made camera phone. He used a Casio QV-10 digital camera, a Motorola Startac cellular

phone, a Toshiba laptop and other accessories bought from a local RadioShack (Kahn, 2012, p. 175). The camera phone posted the photos automatically and wirelessly on a website (Kahn, 2012, p. 176).

This picture is often cited as the first photo taken and shared instantly across public networks using a mobile phone (Goldberger, 2016). However, Kanellos (2007) found out that Kahn was not the first to 'cross-breed' a mobile phone with a digital camera. In 1994, Olympus had released its Deltis VC-1100 digital camera, which had a built-in transmitter for sending photos over phone lines or mobile networks.

Mobile phone companies soon emerged. In July 1999, the Japanese company Kyocera brought the 'Visual Phone' to the market. PHS VP-210 was the first phone that was equipped with a build-in-camera (Goggin, 2006, p. 144; Okada, 2005, p. 56). During the ensuing years, camera phones improved a lot.

At the same time, wireless telephone technology developed. Japanese teleoperator NTT DoCoMo launched the world's first fully-commercial third generation (3G) mobile phone network in Tokyo in October 2001 (BBC, 2001). Using faster wireless connections, mobile phone users were, for example, able to send and receive videos (Takanori, 2009, p. 169).

Media convergence and the formats of news media

Convergence has changed the structures and formats of the news media. Bock (2012, p. 4) argues that 'video journalism is a natural outgrowth of media convergence'.

Gordon, as quoted in Bock (2012, p. 4), recognised three primary features of convergence: technology, organisation and presentation. According to Bock, 'video journalism is a product and manifestation of all three of these facets'.

Before the 21st century, moving picture had been a privilege of TV channels and cinemas. In the early 2000s, newspapers and radio channels started to publish videos on their websites. Some of those utilised video journalists and mobile journalists for newsgathering.

Solo journalism expanded inside the TV market as well. In the United States, video journalism started to play a growing role also in the larger TV stations (Potter, Matsa and Michell, 2013; Wenger and Potter, 2012, p. 80).

The methods of mobile journalism were not limited to professional journalists. News organisations benefitted from user-generated photo and video content. Eyewitness photos and videos played a remarkable role, when the media reported, for example, from the South-East Asian tsunami in 2004, the London transport bombings in 2005 and hurricane Katrina in 2005 (Cameron, 2011, p. 67).

Media companies co-operated with citizen journalists. For example, in 2006, CNN launched a project called iReport. This platform allowed citizens to submit videos and photos to CNN (Bilton, 2015).

Professional journalists were also adding mobile phones to their toolboxes. In 2007, the Finnish mobile phone company Nokia and news agency Reuters started an experiment. Selected journalists were given mobile kits, which included a Nokia N95 smartphone, a small tripod, a keyboard and a solar battery charger (Cameron, 2011, p. 64). Reporters used kits to cover, for example, New York Fashion Week, the Edinburgh TV festival and the Olympic games in Beijing (Kiss, 2007; Cameron, 2011, p. 64).

Westlund (2013, p. 16) argued that Nokia and Reuters' toolkit 'sparked a growth' in mobile journalism. News companies trained their employees in the new working method. Some video journalists swapped their camera for a mobile phone. Mobile journalism began to spread around the world (Westlund, 2013, p. 16).

When wireless connections were sufficiently reliable, journalists started to use mobile phones for live streaming (Westlund, 2013, p. 17). In 2006, when Yankees pitcher Cory Lidle crashed in a small plane into a building in Manhattan, Fox News Channel streamed live video of the event from a smartphone (Wenger and Potter, 2012, p. 84).

Later, several social media platforms, for example Periscope and Meerkat, were built around live streaming. In 2016, Facebook announced that it would emphasize live videos in users' news feeds (Luckerson, 2016). Telecommunications company Ericsson estimated that more 'consumers move beyond on-demand video to live streaming viewing behavior' (Ericsson, 2016, p. 22).

Resistance in newsrooms

Previous research has established that there is a huge amount of resistance towards mobile journalism and video journalism in newsrooms. Cottle and Ashton (1999, p. 31) claimed that small cameras turned out to be 'one of the most controversial elements in the sweeping technological changes underway'.

Solo journalism requires multiskilling and multitasking. One journalist has to concentrate on every aspect of the story, from shooting to interviewing and from driving a car to double-checking sources. Media consultant Martha Stone (2002) argued, that "most backpack journalists are Jack of all trades, and master of none".

Existing studies have reported that journalists are worried about the quality of journalism, because in solo journalism and multimedia journalism tasks are collapsing onto one person's shoulders (Wallace, 2009, p. 694; Wallace, 2013, p. 114; Higgins-Dobney and Sussman, 2013, p. 854).

Blankenship (2016) examined solo journalism in local television news stations in the United States. As part of the research, 222 reporters answered a survey about attitudes towards solo journalism:

Reporters indicated that they generally felt that solo journalism is not good for television news, it is mostly a result of economic considerations, and that solo journalists are not capable of producing the same quality work. Regardless of

whether any of those are actually true, it speaks to a broadbased negative perception of solo journalism among reporters (Blankenship, 2016, p. 95)

In 2013, Perez and Cremedas (2014, p. 166) conducted a web survey in the United States. 155 multimedia journalists (MMJ) responded to the argument: 'One of the criticisms of the MMJ model is that because the reporter is responsible for so many duties, the quality of journalism suffers'. Almost 80 percent of the journalists responded strongly agree or agree.

It is feared that multimedia journalists have less time to spend on important journalistic practises, for example, for double checking sources (Avilés et al. 2004, p. 99). Martyn (2009, p. 201) points out the suspicion that solo journalists could become 'a mere pipeline for a public relations rather than a critical analyst with the time to pause, reflect and add layers of context to the story'.

Solo journalism can affect the diversity and creativity of news videos. According to Bock (2011, p. 714), video journalism can lead to tighter pre-conceptualization. Video journalists told Bock that they are 'more likely to look for quick and easy access to story elements'. This is understandable, if they are working alone with strict deadlines. Bock (2011, p. 715) found that video journalists who were working without daily deadlines were most satisfied with their job.

According to Blankenship (2016, p. 85), some news directors treated solo journalists differently from television crews: they might require less demanding stories from solo journalists. There is a concern that multi-skilling can lead to a lack of in-depth stories and investigative journalism (Avilés et al., 2004, p. 88; Wallace, 2009, p. 694).

Some journalists have expressed a concern about safety issues when they work alone. Journalists see a bigger crew as an advantage when they are working in dangerous situations (Higgins-Dobney and Sussman, 2013, p. 854; White and Barnas, 2011, p. 160, Smith, 2011, p. 27).

At the same time, when newsrooms have turned towards solo journalism, the profits of news outlets have declined and journalists around the world have lost their jobs. Part of the resistance could be result of the concern among journalists (Cottle and Ashton, 1999, p. 31, Stone, 2002). Deuze observed:

Journalists tend to be cautious and skeptical towards changes in the institutional and organizational arraignments of their work, as lessons learnt in the past suggest that such changes tend to go hand in hand with downsizing, layoffs, and having to do more with less staff or resources. (Deuze, 2007, as quoted in Lee, 2014, p. 11)

3. Literature review: Accessibility through mobile journalism

Previous research has shown that solo journalism affects the methods and routines of newsgathering in many ways. It is suggested that video journalism may impact on the narrative of news stories (Bock, 2012, p. 34) and – more broadly – on news agendas as well (Wallace, 2009, p. 685).

Solo journalism can lead to more personal and more intimate journalism (Wallace, 2009, p. 696). The reporter as a filter between the subject and audience may play a smaller role (Bock, 2012, p. 173).

Some fundamental changes evolved regarding accessibility through video journalism and mobile journalism. Earlier literature suggests that the small camera and singular nature of the work process have an effect when a video or mobile journalist tries to gain access to a story (Wenger and Potter, 2012, p. 82; Quinn, 2013, p. 213; Briggs, 2016, p. 277).

Bock (2009, p. 206) argued that 'access is one of the key areas where smaller cameras are making a significant difference'. According to her, a smaller camera affects geographical accessibility and social interactions. In this research, the physical attributes of mobile journalism are observed alongside the geographical features and psychological attributes besides social interactions.

There is lack of academic research on accessibility through mobile journalism. Therefore, in the literature review, the news articles, textbooks, blogs and interviews of mobile journalists are used as well. Research on video journalism, insofar as it concerns mobile journalism, is considered also.

Geographical and physical accessibility

First, we are going to look at the advantages and disadvantages that mobile journalism offers in terms of geographical and physical accessibility. Does mobile journalism change the area in which journalists operate? How can mobile journalists move to a location and within a location? How does the small camera and singularity of the work process affect the geographical and physical accessibility?

Geographical and physical accessibility evolves from the "body-centered" nature of news photographers' work (Bock, 2009, p. 146). A text-based journalist can phone in news stories, but a photographer must be present at the scene (Bock, 2012, p. 18). Therefore, physical access is extremely important for a video journalist and mobile journalist – although some stories can be transmitted through video chat services or social media platforms.

Bock (2012, p. 119) argued that the greatest impact of video journalism on television news originates from accessibility and ease. At least in theory, the overall geographical accessibility increases, when more people with more cameras are working out in the field. The managers of media outlets believe that utilise video journalism can expand their coverage areas and provide "hyper-local" content (Bock, 2009, p. 293; Wallace, 2009, p. 695;

Pavlik, 2001, p. 118). A former producer from Portland, Oregon, told Higgins-Dobney and Sussman (2013, p. 854):

In my ideal fantasy newsroom, every reporter is out there with a camera and a laptop during the day and they're about to post their story iteratively [online]... as they're working. (Higgins-Dobney and Sussman, 2013, p. 854)

It is also thought that media outlets can obtain more videos of unexpected events because journalists carry a mobile device in their pocket (Jokela, Väätäjä and Koponen, 2009, p. 51). However, it has been a controversial and less examined question whether solo journalism increases productivity in practice.

The "all-in-one-device" feature of smartphones can increase the geographical and physical accessibility. Due to the new network technology and constantly developing applications, a mobile journalist can work entirely on location (Heist, 2011, p. 52; Briggs, 2016, p. 277; Väätäjä, 2010, p. 155). A journalist is able to shoot and edit videos, take photos, write stories and send the finished packages straight from the field to the newsroom. It is also possible to distribute live broadcasts from a smartphone to social media platforms or the media outlet's own website.

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The physical size of a newsgathering device also affects the geographical and physical accessibility. Before the age of video journalism, professional TV cameras and the necessary accessories used to weigh so much that one person could not carry them unaided. Since those days, the average weight of a camera has diminished remarkably. A smartphone fits into a pocket and a proper mobile journalist's toolkit into a backpack. Due to this weight reduction, more reporters are able to operate as solo journalists (Bock, 2009, p. 47).

A small video camera or a smartphone is less expensive and usually faster and easier to use than a professional TV camera. Media outlets try to seek cost-savings from salaries as well – the singular nature of the work process seems to be a tempting idea in the middle of the economic crisis.

Together, three factors – inexpensiveness, user friendliness and reduced weight and size – can increase the geographical accessibility.

At the same time, smartphone usage is growing. We are taking more photos and more videos year after year with our smartphones. People are not shooting just for fun – ordinary citizens are adopting journalistic habits as well (Cameron, 2011, p. 66; Quinn, 2013, p. 213; Martyn, 2009, p. 200).

So-called citizen journalism may expand the geographical accessibility of professional mobile journalism. Authorities and gatekeepers cannot necessarily separate professional journalists from ordinary citizens (Bock, 2012, p. 199). Mobile journalists can often film in places from which TV crews are banned (Quinn, 2013, p. 213). Greater accessibility can be a huge advantage especially in countries with poor media freedom.

During the Arab Spring uprisings of 2010-2012, smartphones and social media played an important role in spreading information (Brown, Guskin, Mitchell, 2012). Protesters distributed text messages, photos and videos via social media.

Legacy media outlets have utilised the advantages of smartphones as well. For example, a Syria-based anonymous correspondent filmed a 25-minute-long documentary using an iPhone for Al Jazeera. It was aired on Al Jazeera's show People & Power in 2012. The undercover reporter stated in the documentary that, with an iPhone, he was able to film unobtrusively and get into places that would have been impossible with a big TV camera:

Because carrying a camera would be risky, I took my cell phone with me as I moved around the country. (Al Jazeera, 2012)



An anonymous correspondent filmed a 25-minute-long documentary in Syria. The documentary was aired on Al Jazeera in 2012. You can watch the film by clicking on the photo. (Credit: Al Jazeera English)

It was discovered, even before the smartphone era, that a small camera can be a benefit when journalists have to deal with gatekeepers and authorities. Pavlik (2001, p. 10) described journalist Daniel Bukumirovic, who wanted to report from a partially-destroyed village in Kosovo in August 1998. The police forbade journalists to record the scene. According to Pavlik, Bukumirovic was able to shoot footage using a small video camera hidden in his shirt sleeve.

The singular work process associated with solo journalism may cause disadvantages as well. Bock (2009, p. 400) observed that, when video journalists work alone under increased time pressure and to strict deadlines, they can become too dependent on public relations representatives, the so-called 'appearance managers'. Bock (2011, p. 714) found that video journalists spent a remarkable amount of time negotiating access to locations. When access was denied, they changed topic. This can lead to a situation where journalists report only from locations to which they enjoy easy access.

According to Bock, journalists have always been dependent on sources, but video journalism intensifies this dependence. He argued (2009, p. 400) that, in addition to controlling the location, appearance managers may affect 'the flow of information' and 'the rhetorical nature of the story'. They may also have an impact on the video narrative (Bock, 2009, p. 401).

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The small size of a camera can affect the video narrative and shooting angles. Bock (2009, p. 47) points out that smaller cameras are easier to hold in awkward positions. With smartphones or small action cameras, journalists can shoot more creative footage than with a traditional TV camera.

In a field study of mobile journalism, Jokela, Väätäjä and Koponen (2009, p. 50) found that photographers were able to take photos and shoot videos from camera angles that would have been impossible with big TV cameras. For example, one photographer placed a mobile phone inside an automatic book-returning machine in a library.

Some aspects that have an influence on geographical and physical accessibility have their origin in the technology. The lack of an optical zoom on a smartphone camera reduces accessibility. Mobile journalism trainers have recommended that journalists do not use a digital zoom (Burum, 2016, p. 110), because the picture can become pixelated. Mobile journalism can be a poor newsgathering method if a journalist cannot get close enough to the news event.

Another technical feature, which restricts the usage of mobile phones in certain places, is the relatively small image sensor of smartphone cameras (Burum, 2017). A big sensor can capture more detail with a wider dynamic range. The difference is not huge in daylight, but in low light it is remarkable.

When mobile journalism trainers describe mobile journalism, they often use the concept of a Swiss Army knife. A knife that forms part of a multi-tool is not as good as a proper knife, and a bottle opener is not as good as a proper bottle opener. In the same way, the camera on a smartphone is not as good as a proper video or still camera. It is just good enough to get things done.

A mobile journalist can operate only with a smartphone. However, to fix the technological weaknesses, professional mobile journalists often carry different accessories in their toolboxes.

Eleanor Mannion filmed a 53-minute-long documentary entitled The Collectors for Ireland's public broadcasting company, RTÉ. The documentary was shot entirely using an iPhone 6s Plus phone with a 4K resolution. However, in addition to a phone, Mannion had to use a tripod, radio microphones, a gimbal stabilizer, a camera slider, external lenses, a power bank, external hard drives, a laptop, a smartphone mount, a small tripod and a shotgun microphone (Mulcahy, 2016).

Nick Garnett stated that, when he is engaged in mobile journalism, he carries a Sony a6300 camera, three lenses, a tripod, two gimbal stabilizers, a couple of iPhones and 4-5 microphones (Albeanu, 2017). Garnett had an iPad Pro as well, because he wanted to edit stories on a tablet computer.

All of these accessories reduce the weaknesses associated with smartphone filming, but at the same time mobility suffers.

While some mobile journalists were building versatile kits around their smartphones, others were attempting to get rid of excessive gear. Journalism professor and mobile journalist Judd Slivka stated in his blog (2017) that he carried fewer accessories with him.

Firstly, in 2016, Apple announced the iPhone 7 smartphone with a dual-lens camera. It reduced the necessity for external lenses. Secondly, Slivka thought that video stories on legacy media had different requirements than video stories on social media: 'good-enough quality' was sufficient on Twitter, and on Facebook the majority of people were watching videos with the sounds off (Slivka, 2017). Slivka wrote in his blog:

I always preach that adding quality to mojo products is a tradeoff: The more equipment we add to raise quality, the less mobile we become. But now we're improving the chassis in significant ways. And those technology improvements mean that we can be more mobile and still have a high production quality. (Slivka, 2017)

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Journalists have also faced problems with the authorities because of the small size of a camera. At worst, geographical accessibility can diminish, if a professional journalist looks amateur. A video journalist, who used a small video camera, told Bock (2012, p. 119), that he has been 'ignored by public officials who don't consider him to be part of the mainstream press corps'.

In a case study by Väätäjä (2010, p. 157), nineteen journalism and visual journalism students were given mobile journalist toolkits which were based around Nokia N82 phones. The participants produced text stories, still photos and video clips for an online publication. According to Väätäjä, photographers especially felt that professional journalists would be mistaken for citizen journalists because they use small mobile devices. One participant stated:

When you take the big (systems) camera out, people think that 'Aha, he knows how to use it, he must have done some work before, too', but with the camera phone the reaction is more like 'What is this...' (Väätäjä, 2010, p. 157)

Preconceptions of mobile journalists may have changed since Väätäjä's study was carried out. When the field experiment for this research was conducted in February 2017, no-one wondered aloud why vox pop interviews for a large, well-known Finnish newspaper were filmed using a mobile phone. In the areas where smartphone penetration is lower, mobile journalism can still look doubtful. However, this is likely to change when mobile journalism

becomes more common.

Odd-looking newsgathering devices can even pose a risk in a war zone, argued Nick Garnett. Garnett mentioned that a gimbal device, which is used to stabilize a mobile phone, can look like a weapon through the barrel of a sniper (Scott, 2016a):

You do need to take these things seriously because if someone is looking through a sniper rifle 200m away and they see someone pointing a device at a local person, who are they going to be more interested in? (Scott, 2016a)

Garnett was aware of this and bought a traditional-looking camera before he travelled to Iraqi Kurdistan in 2016 (Scott, 2016a).

* * *

It is possible to observe geographical and physical accessibility by looking at what kind of stories are best suited to mobile journalists and video journalists. However, the existing literature (Blankenship, 2016, p. 69; Wenger and Potter, 2012, p. 82; Smith, 2011, p. 67) fails to offer a consensus about the question. Some journalists think that solo journalism works best for breaking news, while other journalists prefer stories without strict deadlines. The manager of a small US television station told Blankenship:

At my last stations with fewer solo journalists, we would look for stories that were 'one-stop shop' or more event-driven stories where everything is in one place. The story that's going to involve one interview here and then reaction from someone across town or it's going to involve some document digging that's going to take some time, we would assign that to a reporter/photographer team. But now that I have almost all solo journalists, I can't be as picky about what stories I send them to. (Blankenship, 2016, p. 69)

Investigative stories came to the fore, when video journalists told Heist (2011, p. 57) which stories are better served by two-person crews. Other examples were court cases and crime stories. However, several video journalists suggested that solo journalism would be a better method when a journalist has to work in a sensitive situation (Heist, 2011, p. 57).

Experienced solo journalist Preston Mendenhall told Wenger and Potter (2012, p. 82) that solo journalism works best with feature stories. Multitasking can be too exhausting:

Breaking news breaks the back of a solo journalist, and dampens quality. (Wenger and Potter, 2012, p. 82).

Former BBC journalist Lisa Lambden argued that video journalists can outperform traditional TV crews for breaking news provided that one person does not have to do all the work (Wenger and Potter, 2012, p. 82):

When the bad weather hits and homes and businesses are flooded we can field five or six times as many cameras as our opposition. We are able to get really close to the

people affected and our stories are more powerful as a result. (Wenger and Potter, 2012, p. 82)

Social interactions and psychological accessibility

Now we are going to observe the advantages and disadvantages of mobile journalism in terms of psychological accessibility and social interactions. How does the small camera and singularity of the work process affect the interviewees' behaviour? Do people open up more in front of a mobile journalist than in front of a multi-person TV crew?

Ordinary people are not used to giving interviews or being filmed by big TV cameras and multi-person TV crews. Video journalism or mobile journalism can provide a less intimidating way to produce interviews and news stories (Perez and Cremedas, 2014, p. 173; Quinn, 2013, p. 213; Bock, 2012, p. 78; Smith, 2011, p. 27). Journalists have said that they can achieve a more intimate connection with interviewees when working alone with a small camera.

In a case study, Hedley (2013) interviewed video journalist Dave Delozier, who filmed a video story about a war veterans' biker club. The bikers did not hide their emotions when they attended the funeral of a senior woman who had been close to them. In the research, Delozier praised the singularity of this working method:

The fewer people that are around, the fewer distractions that are around, the easier it is for the story subject to just be themselves and let the moments happen, and not be distracted by a crew. That's not to say working as a two- or a three-person crew, great stories can't happen. I just personally think it's easier whenever there are fewer distractions. If it's just me, just my camera, and I'm able to establish a relationship with them, it's pretty easy for those natural moments to happen. (Hedley, 2013, p. 71)

Smith (2011) interviewed video journalists who claimed that, by working alone, they can get closer to people. Former Washington Post journalist Christina Pino-Marina worked as a print reporter, but decided to become a video journalist:

It's as close as I'm going to get with working with a notebook and a pen.... There aren't these distractions with a crew and a bunch of lighting and it doesn't feel like a big production. (Smith, 2011, p. 61)

Journalist Preston Mendenhall saw advantages in his trips abroad (Stone, 2002):

Whenever you pull out a (full-sized) television camera, you become the center of attention. With a small digital camera, you can get a lot more footage by being discreet. (Stone, 2002)

Former Reuters journalist Matt Cowan thought that using the new technology for filming was less intrusive than using a traditional TV camera and microphones (Quinn, 2013, p. 214):

What's amazing is that you can sidle up to someone and take pictures and video,

which people find surprising. It has real potential to capture people's thoughts in places where you would not have a full crew. Its portability is what makes it so exciting. (Quinn, 2013, p. 214)

Bock encountered similar experiences, when she interviewed video journalists. One reporter told her (2012, p. 78) that he was able to obtain an emotional interview from the parents of a daughter who was missing after an earthquake in China in 2008. The reporter praised his small video camera, but Bock thought that a singular video journalist was less intimidating as well.

A BBC newsroom executive credited the singularity of the work process (Bock, 2012, p. 105):

Imagine then if you are dealing with very sensitive issues, very sensitive situations and difficult situations with individuals, and on top of yourself as a journalist carrying the camera, you also have a cameraman, in certain cases you may have the light person, and you have the sound person and so on, and any sense of intimacy is gone because pretty much what you have is a posse. (Bock, 2012, p. 105)

According to Michael Rosenblum (2010), video journalism not only affects interviews – it has a more general effect on news stories. Rosenblum claimed in his blog that video imagery has been stiff and studio-based, because it has been 'hobbled by the technology':

With small HDV cameras we have an opportunity to do for video what Cartier-Bresson did for photo journalism – create an entirely new grammar, a new way of seeing the world and showing it to others. (Rosenblum, 2010)

Photographer Henri Cartier-Bresson made the concept of 'the decisive moment' famous (Chéroux, 2008, p. 94). He developed a style whereby he took photos inconspicuously and discreetly utilising relatively small Leica cameras (Chéroux, 2014, p. 352).

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Video journalism or mobile journalism is not always a good way to strengthen social interactions. In some situations, a small non-professional camera or the singularity of the work process has had a negative impact on journalism.

When Nick Garnett travelled to Iraqi Kurdistan in 2016, he noticed that people were used to idea of a professional TV camera (Scott, 2016a). This was problematic because the interviewees wanted to get their story told to the world. Garnett recalled:

The challenge is identifying yourself as a journalist, and making sure they know what you are using to report – that's where the possibility of issues occurs with mobile journalism techniques. (Scott, 2016a)

The existing literature has shown that multitasking may diminish the depth of interviews. Some journalists think that it is hard to concentrate on interviewing and controlling the camera at the same time (Wallace, 2009, p. 694). It is possible that one part of the work

process will suffer.

In a case study, Blankenship (2015) observed and interviewed reporters from two television stations in the United States: five participants worked as mobile journalists, while five were engaged in newsgathering with TV crews. According to Blankenship (2015, p. 8), the reporters with TV crews spent longer chatting with the interviewees before and after the recorded interview. It was suggested that journalists with TV crews 'may have more time to seek out and maintain relationships with sources' (Blankenship, 2015, p. 14).

In general, the mobile journalists would spend less time setting up equipment, possibly for fear of creating long, awkward silences that would make the interview subject less comfortable. Only one mobile journalist was observed actively engaging with sources at their stories in an attempt to foster a better relationship and secure further story ideas. (Blankenship, 2015, p. 8)

Canadian journalist Nicole Lampa, as quoted in Smith (2011, p. 20), wrote that working alone is not always a favourable way to build confidence:

It's never easy, for example, to knock on the door of a murdered boy's home to ask his mother for a comment or a photograph, but imagine having to do that while asking the grieving woman to wait as you set up the tripod. You simply cannot do this gracefully, and it can be an emotionally draining experience for the videojournalist too. (Lampa, 2008, as quoted in Smith, 2011, p. 20)

4. Interviews: Accessibility through mobile journalism

Altogether, 11 mobile journalists were interviewed for the research between October 2016 and May 2017. The interviewees worked for public and private media companies or as freelancers and entrepreneurs. They were based in the United Kingdom (3 interviewees), the Netherlands (2 interviewees), Germany (2 interviewees), Ireland, Italy, Australia and Qatar.

Of the 11 interviewees who participated in this research, eight were male and three were female. All participants had several years of experience in mobile journalism. The most experienced interviewees had started their careers as solo video journalists in the 1990s.

Most of the interviewees worked for broadcasting companies or had experience of broadcast journalism. In the research, mobile journalism was compared to traditional TV journalism. By choosing broadcast journalists, we tried to ensure that the interviewees had experience of working with multi-person TV crews as well. It is possible that mobile journalists, who work for newspapers or news agencies would have different experiences of the method. Four interviewees worked entirely or partly in the field of mobile journalism or digital journalism training or consultancy.

Six interviewees worked for public broadcasting companies in the United Kingdom, Ireland, the Netherlands, Germany and Qatar. One of them was a freelancer, and the others were employees. One participant worked for a private broadcasting company in the United Kingdom. Four freelancers or entrepreneurs did different tasks – from reporting and training to academic work and consultancy. They were based in Italy, Germany, the Netherlands and Australia.

Two interviewees, Eva Schulz and Yusuf Omar, focused mostly on the so-called social video and the majority of their work was done around social media platforms. In their work, interactivity with the audience was emphasized. The remainder of the interviewees produced more broadcast-style content using smartphones.

With the exception of one interviewee, all of the participants were members of the #mojocon group on Facebook. The group, which is built around the RTÉ MoJoCon conference, exudes enthusiasm about mobile journalism. The answers may have been different if the interviewees had been in the middle of a professional change or resisted the new working methods.

Semi-structured interviews were used in the research. The first four interviews (Group 1) were performed using a longer questionnaire. The participants answered broadly questions about the advantages and disadvantages of mobile journalism.

After the first four interviews, the topic of the research was narrowed down. Seven interviews (Group 2) were carried out using a more focused questionnaire. It concentrated on accessibility in mobile journalism.

Eight interviews were conducted in person and two via Skype. One interviewee answered the questions by email.

Geographical and physical accessibility

When asked about advantages of mobile journalism, all of the interviewees mentioned the increased mobility, which usually leads to greater geographical and physical accessibility.

According to the participants, increased mobility in mobile journalism evolves from two features. Firstly, it is easier to move around with smaller and lighter newsgathering devices. Secondly, a mobile journalist can shoot and edit a story on a smartphone and send it to the newsroom or social media. Nowadays, mobile journalists can even broadcast live streams from a phone – without clumsy satellite trucks.

Seven interviewees mentioned that the mobile journalist's kit is much lighter than a TV crew or even video journalist's kit. In an interview, mobile journalist from BBC Radio 5 Live Nick Garnett said:

I often said that the reason I moved to mobile journalism is because I'm lazy. I hate carrying heavy equipment.

Freelancer journalist from the Netherlands Geertje Algera felt that working with traditional TV equipment was physically demanding. She used to work with TV crews and also as a video journalist for Dutch public broadcasting company KRO-NCRV:

You had a huge tripod and a huge camera and sometimes batteries and like this... I found that it was physically heavy.

Video innovation journalist at BBC Business Unit Dougal Shaw saw remarkable advantages in lighter equipment. As a video journalist, he had to carry around a big camera, a heavy tripod and external lenses:

It's actually quite a big impediment. It's not being lazy, it's just stopping you doing things.

In 2016, Shaw started an experiment that he called the "mojo diet". For a month, he used only a mobile phone to film stories. After his diet, he continued to use a mobile phone, but a better quality DSLR camera as well.

Of the 11 interviewees, seven pointed out that a mobile journalist can do all of the work on one device. For example, it is not essential to export video files from a camera to a computer to edit and send off. Germany-based mobile journalism consultant and trainer Robb Montgomery explained this advantage:

Mobile journalists carry a small camera. A smart camera is connected to editing apps and it is also connected to distribution. That changes everything, because it means that a fully-trained mobile journalist can be a crisis reporter, can be dropped in and

hooked up with a local fixer. Then the reporter can produce and send even finished packages either to social media or back to the newsroom.

TV producer, mobile journalism trainer and academic Ivo Burum from Australia identified the same benefit:

The most obvious advantage of mobile is that a journalist can stay at the location and keep producing edited updates as the story breaks. This will become more important as journalists begin to produce more video and their video editors become inundated with media.

Mobile journalist Wytse Vellinga from Dutch broadcasting company Omrop Fryslân claimed that an all-in-one-device feature can lead to greater coverage:

It's far easier to get out there and not to be stuck to a desk in the newsroom. You can be out in the field all day and still do all your work. And that means you can get more stories and spend more time on your story.

With advanced editing applications, a mobile journalist can make changes to the story as the news event evolves. It is also easy to modify stories for different platforms.

Nick Garnett stated that he has not sent un-edited material to the newsroom for eight years. When Garnett reported from dementia homes in the Netherlands, he edited the story on the train on his way back to the airport. He recorded voiceovers in the airport's prayer room and finished the audio edit on the plane.

When I landed and was able to turn my phone back on, I pressed send. And by the time I was through customs, the producer had a 10-minute piece. I phoned him up and said: 'Look, there's your piece'. And he said: 'What do you mean?' I said: 'Your piece's there'. And he said: 'But I've got two studio directors and the studio booked for a day and half to turn that around'.

In 2001, Garnett was covering the riots for the BBC in Bradford. To keep the radio car safe, the crew had to park it 2.5 miles away from the riot. When Garnett wanted to broadcast a story, he had to run a long way to the car. Fifteen years later, in 2016, Garnett was in France, where football hooligans were fighting during the UEFA European Championship. Garnett was able to stay at the centre of events all the time. He could work relatively safely because a mobile phone did not attract attention.

I was able to be amongst them. I was running in the middle of the riot. I was in the story. And that is the really crucial element of what mobile journalism is. You're not standing on the edge, you're in there.

The size of a mobile phone can change the video narrative as well. Four interviewees mentioned that, with a mobile phone, they can film more creative scenes. Dougal Shaw explained:

You can get a lot of interesting shots and angles that you couldn't get with a normal big camera. You can lift it high up with your tripod or selfie-stick and get some aerial shots. You can stick the small phone into little corners where a normal camera wouldn't fit. You get a different look.

Eleanor Mannion used the small size of a smartphone as an advantage when she filmed a documentary entitled The Collectors. In the documentary, one of the characters is a Lego collector, who built a replica of Her Majesty's Theatre out of Lego bricks. Mannion stated:

I was able to put the iPhone inside the replica and get these lovely close-up shots inside the Lego building. Shots that I wouldn't have been able to get with a traditional camera.

Some mobile journalists thought about geographical accessibility more broadly. They believed that, through mobile journalism, media outlets can obtain "hyper-local content". When asked about the advantages of mobile journalism, three of the 11 interviewees mentioned "hyper-local content".

The argument was based on the low cost of mobile journalism and the growth of smartphone usage. In principle, media outlets can send more journalists out of the newsroom because a mobile journalist's toolkit is cheaper and he/she can work alone. At the same time, usergenerated content has become more important for newsrooms.

In practice, the situation is not always so favourable. Some media outlets have used mobile journalism as a cost-saving method. If mobile journalism leads to redundancies in media companies, there will not necessarily be more journalists out in the field.

CNN senior social reporter Yusuf Omar used Snapchat to gather content from viewers. For example, when Omar worked for the Hindustan Times, the publisher asked six students to document their experiences prior to applying to Delhi University (Scott, 2016b). The Hindustan Times claimed that it was the 'world's first Snapchat reality show'. Omar pointed out new possibilities for crowdsourcing through social media:

In terms of accessibility to cover the part of the world that we are not talking to, to get the global sound, mobile phones are having an incredible penetration to tell the stories that are not being told. I think that's really one of the biggest advantages. It's the ability to do hyper-hyper-local storytelling.

According to some interviewees, mobile journalism makes it easier to get past the gatekeepers and authorities. In some situations, a mobile journalist was allowed to film, but the big TV crews were stopped.

It was suggested that the increased ability to get past the gatekeepers evolved from the widespread nature of smartphone filming. Gatekeepers cannot necessarily spot the difference between a professional mobile journalist and an ordinary citizen. Sometimes, they may grant permission because they feel that a mobile phone is less intrusive than a big camera.

Wytse Vellinga noticed that, when he was covering the Coptic pope's visit to the Netherlands:

When the Coptic pope visited a new church in Friesland, I was allowed to follow him all the way back into the holy part, where none of the other journalists were allowed. It was possible because of the small kit and non-intrusive method of filming.



When the Coptic pope visited Friesland, Wytse Vellinga was able to film in an area from which the traditional TV crews were banned. You can watch the video by clicking on the photo. (Credit: Omrop Fryslân)

Dougal Shaw had a similar experience when he was filming in a skyscraper:

I said to the security guards: 'Do you mind if I film?' You saw that they were about to say no, but then they asked: 'What you are filming with?' And when I said: 'On my phone', they said: 'That's fine'.

Reporter from Rundfunk Berlin-Brandenburg's Snapchat channel Hochkant Eva Schulz noticed that it was more challenging to film in some places, when she worked with a multiperson TV crew and a professional TV camera:

When I worked with a traditional TV crew, we always needed to get permission to shoot in certain public places. Nobody asks permission when you're just filming on your phone, because everybody does that. So, I can shoot wherever I want.

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All of the interviewees pointed out the disadvantages of mobile journalism as well. Usually, the downsides, that may diminish the geographical and physical accessibility associated with mobile journalism, were related to technology.

Of the 11 interviewees, four pointed out that, usually, smartphone cameras lack an optical zoom. If a smartphone's digital zoom is used, the picture quality suffers. Smartphones can be a useless tool if a journalist wants to film, for example, sport. There are also lots of other situations where a journalist cannot get sufficiently close to the subject.

Another technical feature that affects geographical and physical accessibility is filming in low light or in the dark with a mobile phone. A small image sensor on a smartphone camera cannot capture as much light as the image sensor of a DSLR camera or a proper video camera.

Nick Garnett often used DSLR cameras for filming:

Everyone who tells you that the iPhone quality is just as good as any broadcast camera is lying to you. There are times when a broadcast camera is the only way. If you look at the quality of the light that a broadcast quality camera will read and compare that to iPhone, there's no comparison. It's not a very good camera.

Editing applications for mobile phones are not as advanced as the professional editing software for computers. Mobile journalists praised the "all-in-one-device" feature of smartphones, but occasionally they used computers or professional devices for editing. It can still be faster to edit long-form videos on a computer than on a smartphone.

When Eleanor Mannion filmed The Collectors documentary, she exported video files to a computer and a cloud service. The producer of the documentary watched the video clips and gave feedback. Finally, the 53-minute-long documentary was edited on a traditional editing platform within RTÉ.



Eleanor Mannion directed a 53-minute-long documentary The Collectors for RTÉ. The documentary was filmed entirely on an iPhone. You can watch a trailer of the documentary by clicking on the photo. (Credit: RTÉ)

Connectivity affects geographical accessibility. Especially in rural areas, the satellite internet services may be more reliable than mobile broadband networks. While manager of media development at Al Jazeera Media Institute Montaser Marai praised the mobility within mobile journalism, he mentioned connectivity problems as an example of the disadvantages in terms of geographical accessibility:

The most problematic thing is that, if you want to send material to the other place and you don't have a good signal, then you have to go back to a place where you have a wifi network or another internet connection. In some countries or places, like up mountains, it can be a big challenge.

Social interactions and psychological accessibility

The interviewees suggested that mobile journalism increases the overall psychological accessibility and strengthens social interactions. However, there are some factors that may diminish these.

Most of the participants felt that people prefer to give an interview to a mobile journalist than to a multi-person TV crew. A few of the interviewees were unsure about this.

Ten participants mentioned that a journalist can get psychologically closer to the story or subject when using mobile journalism. They claimed that, usually, the interviewees are more relaxed and open up more to a mobile journalist than to a traditional TV crew.

It was suggested that this greater psychological accessibility evolves from three factors. Firstly, smartphones and filming with them is common nowadays and people are used to it. Secondly, a mobile phone feels a less intrusive device than a big TV camera. Thirdly, usually, a mobile journalist works alone without a big crew.

When Yusuf Omar worked for the eNCA news broadcaster in South Africa, he participated in the mountain hike with victims of sexual abuse and rape. In the Drakensberg-Maluti mountains, he interviewed people using an iPhone and Skype.

Many of these people haven't even told their own parents that they had been raped at some point in their life. And they were willing to do it on live television when I was recording using a mobile phone via Skype. When I held my phone, they forgot that I was even there. We are so used to having mobile phones in our proximity.

Omar thinks that he would not have obtained the same results with a TV crew and a big camera:

No, I don't think so. I don't want to put a big broadcast camera in someone's face when they're telling the most sensitive stories of their lives. I don't think I'd get the same interviews.



Yusuf Omar hiked up to the mountains with victims of sexual abuse and rape. He covered the event using an iPhone and Skype. You can watch a live video story by clicking on the photo. (Credit: eNCA)

Geertje Algera had a simiar experience in the Netherlands. Algera has created a lot of stories about sensitive issues – like religion, islamophobia and porn addiction. When Algera wanted to create a video story about a popular Moroccan-Dutch blogger, it took six months to convince the young woman to give an interview. Algera promised that she would do the interview herself and use only a small iPhone for the filming. Algera even promised to show the footage to the interviewee after shooting it. Finally, the blogger agreed and let Algera film her, even in her bedroom.

To me, it's not only about the phone. It's about building trust and it's about intimacy. She let me into her tiny bedroom. For me, that was special. I learnt that I can gain trust by using my phone, by using mojo. For me, this is the difference between mojo and traditional journalism.

Algera thinks that the media have moved further away from "normal people". She said that there were not "normal" supporters of Donald Trump on Dutch television before the presidential election in the United States – all of them were "extremists".

Wytse Vellinga said that, usually, it is difficult to get the supporters of the Dutch right-wing populist party in front of a camera. Vellinga and his colleagues used mobile journalism to interview voters for the Freedom Party before general election in March 2017.

We decided to go onto the streets as mobile journalists to get voters to talk about their issues. In the past, we had some problems getting voters from the extremist rightwing party to talk to us. But because of the way we worked now, it was far easier to get them on camera.



Geertje Algera filmed a video story about a Moroccan-Dutch blogger. You can watch the video by clicking on the photo. (Credit: NPO Spirit / KRO-NCRV Geertje Algera)

Ivo Burum said that, in Australia, mobile journalists who live in remote communities have created local stories that were aired on the national prime time news.

Mojo is a key to perpetuating social interaction especially from and between remote and marginalised communities. It enables never before imagined access to the campfire where we hear grass roots stories from a very different perspective. This potentially perpetuates a psychological state where people reflect on their lives, through storytelling. The outcome is hopefully a more politicised and relevant form of storytelling.

When Dougal Shaw shot a video story about a manga shop in Glasgow, the shopkeeper was very worried beforehand, because his first language was not English.

He told me after the interview: 'I couldn't sleep last night. I was so nervous getting ready for this interview. But when you turned up with the phone, I was so relieved. I can't tell you how much that helped me'.

Nick Garnett had similar experiences. He interviewed a woman about her child's illness. Before agreeing to be interviewed, the woman said that she did not want to talk in front of a big microphone:

I said, I'm just going to use my phone. We sat there and instead of her looking down at a great big microphone, she just looked into my eyes, talked to me and opened up. That is the type of thing that only happens because we are using technology that every single person has.



Dougal Shaw visited a manga shop in Glasgow as part of his "mojo diet". For a month Shaw used only a mobile phone to film videos for the BBC. You can watch the video story by clicking on the photo. (Credit: BBC)

Eleanor Mannion pointed out that she was able to spend longer with people when she was filming The Collectors:

It was definitely part of my experience, when filming The Collectors, that people were way more relaxed and more comfortable and kind of relieved that it was just me coming into their house. Because, as much as they were excited to take part, there was always going to be nervousness as well. The people in my documentary were not media professionals, they were just people from everyday life. They weren't used to being filmed.

If mobile journalism allows journalist to get closer to the story or the subject, by utilising Snapchat journalists can possible get even closer. Snapchat reporter Eva Schulz stated that people are so used to being filmed on a mobile phone that they talk to her more easily.

Before the presidential election in 2016, Schulz travelled to the United States. She felt that she achieved a deeper connection with supporters of Donald Trump by using Snapchat:

If you ask, would you say something for my phone, that's not as strange and big for them as if I'd asked the same question with a shoulder camera and a team. It's far easier to approach strangers and people on the streets.

Hochkant is targeted at 14-19 year-olds. Schulz stated that they get lot of feedback from the audience. Teenagers sent videos and photos even from their bed before going to sleep.

To me, it feels like you can really get inside your followers' lives. Where are they? What does it look like? What do they look like? What kind of tone and language do they use? How do they live and how do they see the world?



Eva Schulz covered the US presidential election for German Snapchat channel Hochkant. You can watch a compilation of her work by clicking on the photo. (Credit: Hochkant / Rundfunk Berlin-Brandenburg)

When Geertje Algera worked with a TV crew or a big camera, sometimes she faced aggression from strangers. With a mobile phone, she does not attract attention.

If I'm with my phone and I'm filming in the neighbourhood, nobody's going to call the police. People think that this is just a girl who's filming something on her iPhone. Basically, they always think that I'm taking pictures, they don't think that I'm filming.

In terms of psychological accessibility and social interactions, the interviewees could not identify the many disadvantages of mobile journalism. However, a lack of credibility was mentioned in several interviews. Italian mobile journalist Francesco Facchini pointed out that the perception of mobile journalists can vary in different countries:

In Italy, when you're in front of public figures with a mojo kit, they think that you're joking. Someone looks at your kit and says, are you working with that? They don't believe it. We don't have the culture. But now they're starting to see many journalists filming on different types of smartphones and they're starting to believe you.

Ivo Burum recognized the problem as well:

Sometimes, people feel that mojo is merely amateur citizen-generated footage. I think this perception is shifting as mojo becomes a more prevalent news form and as print journalists learn more about video.

Wytse Vellinga had experienced similar situations. He said that mobile journalists should simply explain more clearly what they are doing.

* * *

The interviews showed that mobile journalism increases accessibility rather than diminishing it. It was suggested that greater accessibility through mobile journalism will change storytelling and narrative as well.

The interviewees used the following attributes when they described storytelling in the age of mobile journalism: "More genuine", "authentic", "more intimate", "faster", and "more informal". Yusuf Omar stated:

I don't think that we're using mobile phones to create TV-style journalism. We're creating social video, what is something totally different.

While the fast speed of mobile journalism was mentioned in many interviews, Eva Schulz noted that speed is not always desirable. She thought that media outlets should not start live broadcasts so eagerly straight after terrorist attacks.

Should we actually go live, when we don't know anything? It concerns me, especially given my young audience.

Montaser Marai thought that mobile journalists are inspired by citizen journalists or ordinary citizens who use mobile phones to shoot newsworthy events. It may change the way in which professional journalists tell stories.

Dougal Shaw and Robb Montgomery mentioned one psychological aspect of the new style of storytelling. In traditional TV journalism, the interviewees speak to the reporter, while on smartphone videos, people often speak directly into the camera. Montgomery mentioned:

What does that mean psychologically? It means that you're giving them power. Their messages may be lies, their messages may be propaganda, which's why in traditional filming we have them look at the reporter – not at the lense.

5. Comparative field experiment

Most of the journalists who were interviewed for the research stated that people prefer to be interviewed by a mobile journalist than a two-person TV crew. In order to test this claim, a comparative field experiment was used as a research method.

A series of interview approaches was undertaken in a shopping centre in Helsinki on 23-24 February 2017. The aim was to discover whether a mobile journalist gets more so-called vox pop interviews than a two-person TV crew.

A vox pop is an abbreviation for the Latin phrase vox populi, which means "the voice of the people" (Oxford Dictionaries, 2017). Vox pop interviews are a widely-used method by media outlets all over the world. Usually, journalists do vox pop interviews when they want to add the voice of the general public to their stories. Vox pop interviews are typically short and done in public places.



The two-person TV crew used a Sony PDW-530P camera, a camera stand and a reporter microphone. The mobile journalist worked with an iPhone 6S Plus, a handle grip, a lavalier microphone and an external lense.

Methods

The convenience sampling method was used to select the participants. According to Adams and Lawrence (2015, p. 128), convenience sampling is 'a type of nonprobability sample made up of those volunteers or others who are readily available and willing to participate'.

Participants in the field experiment were chosen from people who passed by the interview spot. The mobile journalist and the two-person TV crew each approached 200 people, respectively.

The TV crew consisted of a reporter and a camera operator. Both of them were male. The TV crew was equipped with a Sony PDW-530P camera, a reporter microphone and a stand.

According to Bock (2009, p. 146), the way in which photographers use their bodies affects how they interact with the subjects. In addition to minimizing the role of the body, the author acted both as a reporter for the TV crew and as the mobile journalist.

The mobile journalist was equipped with an iPhone 6s Plus mobile phone, a handle grip, a lavalier microphone and an external lens.

The covert observation method was used in the experiment, whereby the observer does not reveal that the participants are under observation (Adams and Lawrence, 2015, p. 111). This method was used to avoid social desirability bias, where the participants may act based on how they want to be perceived (Adams and Lawrence, 2015, p. 106).

The approaches were carried out as follows:

- 1. People were passing by the interview spot.
- 2. The reporter tried to make eye contact with a potential participant. He moved at most three meters from the interview spot.
- 3. The reporter said: "May I ask a question?"
- 4. If the participant stopped, the reporter said: "We are doing vox pop interviews about holidays for Ilta-Sanomat. What is the best way to spend a holiday?"
- 5. After the participant had answered the question, the reporter revealed that he was not doing an interview for Ilta-Sanomat. The participants were told that they were part of research by Oxford University's Reuters Institute. They were also informed that the filmed footage may be used in a video that will be published in connection with the research.

Ilta-Sanomat is the largest news media in Finland. According to the TNS Metrix (2017), www.iltasanomat.fi reached over 2 million people each week in spring 2017. The paper had 377,000 daily readers in 2016 (Finnish National Readership Survey, 2017).

The author works as a news editor for the Ilta-Sanomat, but he was on study leave when the experiment was conducted. We had company's permission to use the newspaper's name in the field experiment.

There are lot of variables in vox pop interviews. Firstly, a question affects a person's willingness to give an interview. An easy question about holidays was chosen to minimize the effect of a question.

Secondly, people have different attitudes towards media outlets. In the experiment, it was not desirable that a person's possible attitude towards a media outlet determines his/her behaviour. Therefore, microphones were used without windshields with the newspaper's brand.

Thirdly, the place where the interviews are carried out can affect people's willingness to stop and answer questions. It is easier to get interviews inside than outside in the middle of a snowstorm. The field experiment was conducted in the Kamppi shopping centre. Kamppi seemed to be a favourable place to reach people from different backgrounds. In addition to dozens of shops, there are also two busy bus terminals at Kamppi. The interview spot was chosen near the terminal where local buses to Espoo operate. Shopping centre manager Heli Vainio said that approximately 88% of visitors to Kamppi are from the capital region (Helsinki, Espoo and Vantaa) and approximately 12% from the rest of Finland or abroad.

Fourthly, people may be more willing to stop and answer questions at a certain time of day. We tried to make the conditions for the mobile journalist and the TV crew as equal as possible. To eliminate the effect of time, approaches were performed in the following order:

- Thursday 23 February 2017: 10.25-12.20: 100 approaches by the TV crew
- Thursday 23 February 2017: 14.05-16.20: 100 approaches by the mobile journalist
- Friday 24 February 2017: 10.32-12.30: 100 approaches by the mobile journalist
- Friday 24 February 2017: 14.05-15.35: 100 approaches by the TV crew

The Council for Mass Media in Finland offers guidelines to journalists. These guidelines are widely adopted in the legacy media outlets. The Finnish News Agency has detailed ethical codes concerning, for example, interviewing situations. Both guidelines were followed in the experiment.

The participants' actions were written down on the code sheet. There were four possible reactions:

- 1. Participant stopped
- 2. Participant didn't stop
- 3. Participant stopped and gave an interview
- 4. Participant stopped but didn't give an interview

In addition, the participant's age and gender were written down on the code sheet. If a participant passed by without stopping, his/her age was estimated.

The existing literature shows that estimated ages can be fairly accurate. When Rhodes (2009, p. 9) reviewed previous studies on estimated ages, he concluded that estimations of the age of unfamiliar faces were 'remarkably accurate', but there was also some bias. According to Rhoses (2009, p. 3), in the studies performed by Burt and Berrett (1995), George and Hole (2000) and Sörqvist and Eriksson (2007), the estimates deviated from the actual ages by from 2.39 to 4 years.



The mobile journalist and the TV crew approached 400 participants in a shopping centre in Helsinki. You can watch a video of the experiment by clicking on the photo.

Results

Altogether, 400 participants were approached in the experiment. Half of the approaches (200) were done with a mobile phone and an individual journalist, and half (200) with a TV camera and a two-person crew.

We defined the population as citizens of the capital region. Helsinki, Espoo, Vantaa and Kauniainen had 1,138,708 citizens in 2016 (Statistics Finland, 2017). The margin of error would be 6.93 percent, with a confidence level of 95%.

There was a significant difference between the participants reacted when approached by the TV crew or by the mobile journalist. As shown in Figure 2, people were 59.5 percent more likely to stop and give an interview to the mobile journalist than to the TV crew.

When the mobile journalist approached the participants, 43.50% stopped and 33.50% gave an interview. Only 29.50% of the participants stopped in the front of the TV crew and 21% gave an interview.

It is worth mentioning that the mobile journalist encountered more situations where a participant stopped but did not give an interview. The difference was not huge (8.5% and 10%), but may indicate that people who do not want to speak to a journalist can see a bigger camera from further away and try to avoid an interview spot. On the other hand, some of the participants stated that they confused the mobile journalist with a street fundraiser.

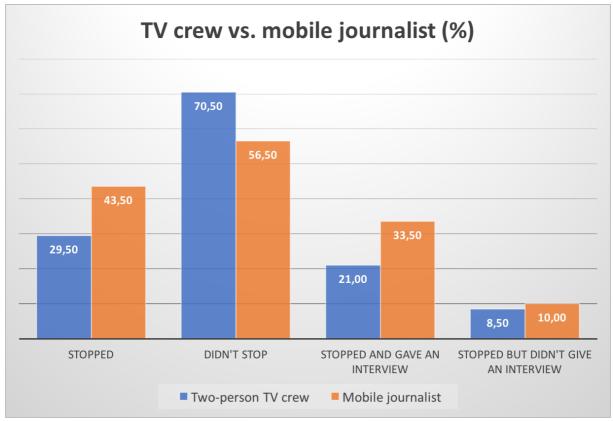


Figure 2.

* * *

The sample's mean age was 42.86 years (SD = 17.05). The mean age in the TV crew's sample was 43.80 years (SD = 16.84), and in the mobile journalist's sample, it was 41.93 years (SD = 17.25).

The mean age of the participants who stopped for the TV crew was 45.58 years, while that of those who stopped for the mobile journalist was 40.34 years. The participants who stopped and gave an interview to the TV crew were, on average, 43.07 years-old, while those who stopped and gave an interview to the mobile journalist were, on average, 39.96 years-old.

The sample was divided into four groups:

- 1. Under 40 years-old, approached by the TV crew (N = 87)
- 2. 40 years-old and over 40 years-old, approached by the TV crew (N = 113)
- 3. Under 40 years-old, approached by the mobile journalist (N = 103)
- 4.40 years-old and over 40 years-old, approached by the mobile journalist (N = 97)

As shown in Figures 3 and 4, mobile journalism was a more effective method for obtaining vox pop interviews in both age groups, although the difference between the methods was remarkably bigger among people who were under 40 years-old. When the TV crew approached participants, 22.99% of the younger group and 19.47% of the older group gave an interview. With the mobile journalist, 39.81% of the younger participants and 26.8% of the older participants gave an interview.

This result may indicate that the younger generation is more inclined to give interviews to mobile journalists, because they are used to filming videos and being filmed on a mobile phones. However, when the sample is split into smaller groups, the margin of error and possibility of statistical bias grow.

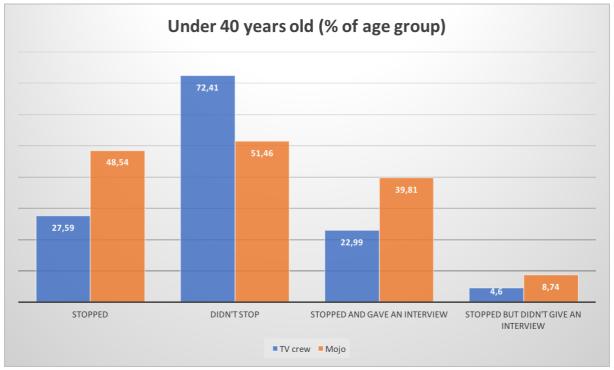


Figure 3.

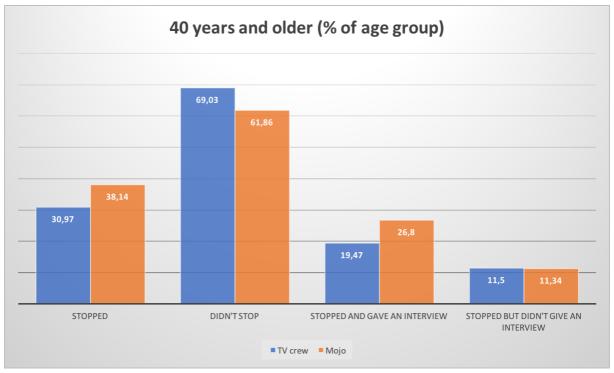


Figure 4.

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Each participant's gender was estimated. In the sample, females were slightly overrepresented: 53.5% (214) of the participants were female and 46.5% (186) male. In the TV crew's sample, 53% (106) were female and 47% (94) male, while in the mobile journalist's sample, 54% (108) were female and 46% (92) male.

The gender distortion in the sample mirrored, to some extent, the gender balance in the capital region. According to Statistics Finland (2017), 51.7% of citizens in Helsinki, Espoo, Vantaa and Kauniainen were female and 48.3% male.

As shown in Figures 5 and 6, females were more inclined to participate in the vox pop interviews. Of all the female participants, 42.54% stopped and 32.24% stopped and gave an interview. Of all the male participants, 29.54% stopped and 21.51% stopped and gave an interview.

The female participants who were approached by the mobile journalist were most inclined: 38.89% stopped and gave an interview. There was a significant difference compared to the males' response: 27.17 % of the men approached by the mobile journalist stopped and gave an interview.

However, in both gender groups, mobile journalism was a more efficient way to get an interview. When the TV crew approached the participants, only 25.47% of the females and 15.96% of the males stopped and gave an interview.

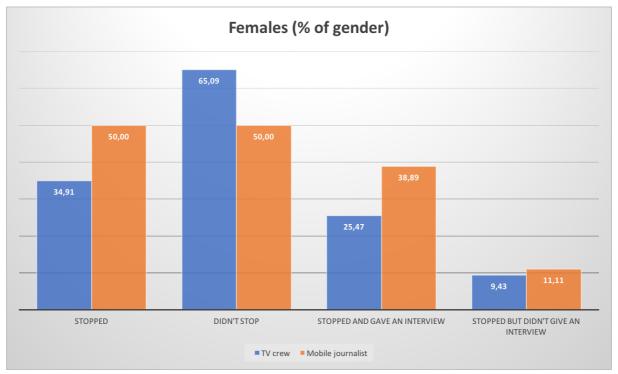


Figure 5.

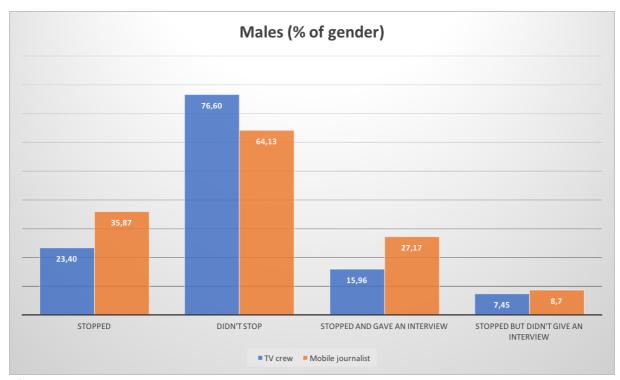


Figure 6.

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Some of the participants were asked which interviewing method they preferred. The answers should be treated with some reservations, because most of the interviewees had no previous experience of either method.

However, the answers offer an interesting overview on how ordinary people perceive TV crews and mobile journalists. The answers revealed a serious disadvantage of mobile journalism as well: some people said that they trust a TV crew more than a mobile journalist.

"If it'd been a big camera, I probably wouldn't have stopped here at all... feeling nervous." (Woman, 72 years)

"I prefer the mobile phone thing. It feels easier." (Man, 47 years)

"This is better (mobile journalism). If it's a big camera, you might feel like you're going to give some big thing or you're going to be asked very serious questions. This is very familiar. We're very familiar with mobile phones. We use them every day. So it's fine and it's fun." (Man, 23 years)

"Hard question. I haven't encountered either of them so often. I can't say... Perhaps I'd choose one person. There's less pressure." (Man, 26 years)

"Whatever. I answer to anyone if they attack me. And then I hope that I don't look awful. I don't really care. Perhaps a bigger crew is little bit of pressure." (Woman, 27 years)

"I prefer this (mobile journalism). It doesn't feel so scary when there's only one person and one camera... If I compare it to a situation with two persons and another one would be with the camera there." (Woman, 37 years)

"I'd choose a bigger camera. It feels more reliable." (Woman, 20 years old)

"I don't know. This was the first time I gave an interview. Maybe I'd prefer to speak one on one, because it feels friendlier. Maybe. And more personal." (Man, 26 years)

"I prefer a normal camera, because if someone shoots with a mobile phone, it looks like it doesn't go to an official channel. It (the TV crew) feels more reliable." (Woman, 32 years)

"For me, it doesn't matter. As long as someone wants to listen to me, it's fine. Because when someone listens me, it means that I deliver something to someone." (Man, 45 years)

"For me, it's more important for which medium it is. It's irrelevant how many people there are or what kind of equipment they're using." (Woman, 35 years)

"I thought that you're a chugger. That's why I thought for a moment should I stop or not. For me, it doesn't make a difference whether I'm filmed on a big camera or a mobile phone." (Woman, 60 years)

"A proper camera is more convincing. Anybody can shoot with a phone. You don't know that it's real if it's just a phone." (Woman, 26 years)

"Perhaps I prefer this (mobile journalism). I'm a woman, I start to think about my hair... This feels less dangerous. Somehow I think that this's going to be published somewhere on the internet, not on TV." (Woman, 37 years)

"I prefer to stop in front of the proper camera, if I compare it to a situation where someone points at me with some iPhone. It just feels...I prefer the proper one." (Man, 18 years)

Discussion and restrictions

The mobile journalist got more vox pop interviews than the two-person TV crew. Mobile journalism was a more effective way for both gender groups and both age groups.

However, interviewing situations vary widely. Even though the main outcome was clear, these results do not necessarily apply to every kind of interview.

The kind of accessories that mobile journalists use when conducting interviews varies a lot. In the field experiment, a relatively basic and light kit was used. For example, the results might have been different if the mobile journalist had used the same big reporter microphone as the TV crew instead of a small lavalier microphone.

Kamppi shopping centre offered a great variety of interviewees, but there is a possibility of sampling bias. It is likely that some members of the population were overrepresented in the experiment (Adams and Lawrence, 2015, p. 120).

The results could vary in different areas of the country or different parts of the world. Finns are keen on using smartphones. According to the market research company eMarketer (Clague, 2017), about 75% of internet users in Finland will be smartphone users in 2017. An analysis by the telecommunications specialist Tefficient shows that Finland is the leading country in terms of mobile data usage (Tefficient, 2016).

It is presumed that the citizens of the old Nokia country are used to filming more videos on their smartphone than people in countries with lower smartphone penetration. However, mobile journalism has not been a widely adopted newsgathering method in the legacy media outlets in Finland.

6. Conclusions

This research has shown that, in many situations, mobile journalism can offer greater accessibility to a story than traditional TV journalism. Often, journalists get closer to the story and subject by working alone with a smartphone.

Mobile journalists stated that geographical and physical accessibility is usually greater in mobile journalism than in traditional TV journalism. The existing literature, the interviews and the field experiment indicated that mobile journalism can strengthen social interactions and increase psychological accessibility.

However, the interviewees mentioned some disadvantages that mobile journalism brings up in terms of accessibility. In terms of social interactions and psychological accessibility, the downsides are mostly related to the credibility of mobile journalists. Smartphones suffer from several technological disadvantages – the lack of an optical zoom and poor performance in low light – which diminishes the geographical and physical accessibility associated with their use.

Since the interviews were limited to experienced mobile journalists, the problems that beginners usually face were not identified. Because most of the interviewees exuded enthusiasm for mobile journalism, it is possible that some interviews may have offered even an overly positive outlook on the newsgathering method.

* * *

In the field experiment, people gave considerably more vox pop interviews to the mobile journalist than to the two-person TV crew. This was the first time that this kind of comparative field experiment was used to explore accessibility through mobile journalism. A limitation of the field experiment is that it was performed only in one place. The experiment should be repeated in different countries or in rural areas. It would be interesting to see whether smartphone penetration or media culture affects the results.

Further research could also be conducted to determine the physiological impacts of different interviewing methods. Does the newsgathering method affect the interviewees' stress level? Does it have an impact on the interviewees' brain activity? What happens to the heart rate?

Previous research on video journalism and mobile journalism focused heavily on journalists' attitudes to professional change. Further studies should determine how the most important part of the work – the story itself – changes as mobile journalism spreads. It would be interesting to see how the greater accessibility through mobile journalism affects the interviews, story structures, emotionality and video narrative.

Another possible area of future research would be to investigate how media outlets have adopted mobile journalism into their newsroom's workflow and routines. According to the author's experience, adoption can be difficult, at least in newspapers – partly because

newspapers have a relatively short experience of using moving pictures as a storytelling method.

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Some important aspects, that were not at the core of the research, emerged from the interviews. These points can be crucial, so it is essential to mention them in this chapter.

Some of the interviewees demanded that news organizations should offer constant training to mobile journalists. Moreover, it is important that mobile journalists can use their skills regularly.

Mobile journalism consultant and trainer Robb Montgomery stated that the multitasking newsgathering method can be "overwhelming". Sometimes, managers or editors, who lack any personal experience of mobile journalism themselves, can have unrealistic expectations.

They don't realise that they need a culture change, where everyone in the organisation can speak picture grammar. You should have specialised teams that can do, for example, Facebook live, studio work, or projects of a documentary nature. At the top of the pyramid, you should have James Bonds who can do everything.

Journalists should be aware of the ethical problems that increasing accessibility through mobile journalism can engender. The field experiment showed that especially older interviewees assumed incorrectly that mobile phone videos cannot be aired on TV. For some of them, that was the reason why they agreed to give an interview. It is essential that mobile journalists clearly explain where the video will be published, although, in our age of big conglomerates, this can be a difficult task.

Some mobile journalists have stated that mobile journalism can be a good method for filming news not only more discreetly but even secretly. At the same time, journalists should consider ethics. This is supposed to be an essential part of mobile journalism training as well. Nick Garnett mentioned:

Journalists still have to realise that they are journalists. They are not voyeurs, they are not secret-recorders with their small device. You can stay safe and you can stay low key, but you are still a journalist, you have a responsibility for the way you act.

There is lot of technology-enthusiasm among mobile journalists. Ivo Burum was worried that the technology can remove the focus from the story:

The techno-determinist approach can be dangerous. I believe mojo is a neojournalistic form of storytelling that starts with digital literacy before it wraps around the tech.

* * *

Mobile journalism – as with many previous professional changes – does not come without fear. Professional videographers and photographers are worried that they will lose their job while news organisations are turning reporters into mobile journalists. This fear is not entirely unjustified, because some organizations utilise mobile journalism mainly for cost-saving.

Some media outlets have tried to build newsrooms with video journalists only. In Blankenship's research (2016, p. 85), a few of the news directors felt that solo journalists 'have difficulty with more complex-stories'. It would be worrying if mobile journalism leads to a decrease in, for example, investigative reporting. That is why newsrooms need a diversity of talent.

Because video supply and consumption is growing around the world, newsrooms have urged stills photographers to shoot video as well. Some photographers fear that video is going to kill stills photography. This concern seems to be groundless.

Strong storytelling formats have always survived. Media professionals need to choose the best format or method for telling a story. As Stephen Quinn (2013, p. 216) mentioned, text and graphics can be the best way to tell a story about a complex economic issue, while video is better for showing emotions and action.

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In May 2017, I was sitting at the MoJoCon conference in Galway, Ireland. On the stage, experts were talking about virtual reality and what possibilities that offers to media outlets.

The most important message was projected onto the wall during the conversation: "A good story is a good story – regardless of the media format or technology."

In the middle of the fuss, it was a comforting message. We are still telling stories by a campfire, although some of us may use mobile phones at the same time.

7. List of Interviewees

Group 1 (broad questionnaire):

- Geertje Algera, 17.11.2016, London, UK
- Nick Garnett, 22.11.2016, Skype interview
- Eleanor Mannion, 25.11.2016, Skype interview
- Dougal Shaw, 2.12.2016, London, UK

Group 2 (more focused questionnaire):

- Ivo Burum, 3.-4.4.2017, email interview
- Robb Montgomery, 7.4.2017, Perugia, Italy
- Wytse Vellinga, 5.5.2017, Galway, Ireland
- Eva Schulz, 5.5.2017, Galway, Ireland
- Montaser Marai, 5.5.2017, Galway, Ireland
- Yusuf Omar, 5.5.2017, Galway, Ireland
- Francesco Facchini, 6.5.2017, Galway, Ireland

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