Full length article

No two gangs are alike: The digital divide in street gangs' differential adaptations to social media☆
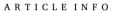
Andrew Whittaker [a,*], James Densley [b], Karin S. Moser [a]

[a] *London South Bank University, UK*
[b] *Metropolitan State University, Minnesota, USA*

ABSTRACT

Social media provide novel opportunities for street gangs to operate beyond their traditional borders to sell drugs, recruit members and control their territory, virtually and physically. Although social media have contributed to the means available to street gangs today, it does not mean that every gang agrees on their use. Drawing on different perspectives (ex-gang members, law enforcement) on gangs using a multi-method design in a London borough, the current study shows that social media have polarized gangs, resulting in two distinct types of digital adaptation. The proposed division of 'digitalist' and 'traditionalist' gangs is rooted in Thrasher's (1927) dictum that no two gangs are alike and explains how some gangs prefer to keep a low profile, thus, avoiding social media use. 'Digitalists', by contrast, prefer to use social media as a way to gain reputation and territorial expansion. They use it to brand themselves and to appear attractive for recruits and customers alike. These differences can be theoretically explained firstly as a generational gap, meaning that younger gang members prefer the use of social media; and secondly, by how well established a gang already is, as newer gangs need more attention to establish themselves.

1. Introduction

The 'father' of gang research, Frederic Thrasher (1927, p. 5), famously observed that "no two gangs are just alike" and for nearly a century, empirical research on gangs has confirmed Thrasher's "endless variety of forms." The question at the heart of this study is whether Thrasher's criminological maxim holds for the ways in which gangs have adapted to meet the demands and opportunities of social media. This paper examines the impact of digital technologies on street gangs and the stakeholders who interact with them, from gang members to victims, and consumers of gang artefacts to control agents. Drawing on unique data from a multi-method study conducted in London, England, this paper examines for the first time how social media shape not only gang member behaviors on the *individual* level, but gang behaviors on the *group* level. One of the key dilemmas that gangs are facing today is whether or not to embrace social media for their potential reputational benefits or to shun them owing to the danger of exposure that can backfire. While this is a problem gangs share with other social media users, the stakes in illicit networks are presumably higher (Gambetta,

2009) as beyond law enforcement predation, gang members are at an elevated risk for violent victimization (Katz, Webb, Fox, & Shaffer, 2011).

Gang research has experienced an "international turn" in recent years, and since about 2008, "the study of gangs was no longer the study of gangs in the United States" (Pyrooz & Mitchell, 2015, p. 43). For example, in 2008, John Pitts published *Reluctant Gangsters: The Changing Face of Youth Crime*, the first study to challenge the prevailing wisdom that Britain was characterized only by resistant youth subcultures but not by violent street gangs (e.g., Campbell & Muncer, 1989). Drawing on qualitative research in the London borough of Waltham Forest, Pitts (2008) offered a theoretical explanation centered on the impact of globalization and the concentration of poverty in deprived neighborhoods, which acted as crucibles for gang activity. Pitts argued that gangs had evolved out of traditional youth group structures and young people were pragmatically joining them in an effort to negotiate the harsh realities of an increasingly violent, territorial, street life.

Coincidentally, 2008 was also the year the second generation iPhone entered the UK market and Apple introduced the App Store—its

distribution platform for third-party applications like social media. Pitts. (2008) study of gangs made literally no mention at all of smart phones and social media. However, subsequent research has found UK gangs use popular platforms such as Facebook, YouTube, Instagram, Snapchat, and Twitter to boast about their affiliations and to antagonize their rivals, whether in choreographed drill music videos or spontaneous posts of everyday life (Densley, 2013; Irwin-Rogers & Pinkney, 2017; Pinkney & Robinson-Edwards, 2018; Storrod & Densley, 2017).

Further, in the decade since Pitts. (2008) study, the online activities of Britain's gang members have come under increased public scrutiny. HM Government's (2018) newly adopted *Serious Violence Strategy* explicitly singled out social media for glamorizing gang life, escalating gang tensions, and normalizing weapon carrying. Social media also are described as the central organizing feature of the "county lines" model of drug distribution which describes the fact that today gangs traffic drugs outside of traditional, local, territorial boundaries (Coomber & Moyle, 2018; McLean, Robinson, & Densley, 2020; Robinson, McLean, & Densley, 2019; Storrod & Densley, 2017).

Therefore, it seems safe to assume that in the past decade social media have completely changed the ways in which gangs and gang members communicate and organize themselves. However, there is still a tacit assumption in both official reporting and the existing scholarship that all gangs are created equal when it comes to social media adaptation; which seems unlikely given Thrasher (1927) dictum and what we know about (a) the digital generation gap in other (non-gang) contexts (Ofcom, 2017) and (b) the "complicated" social lives youth live on social media more generally (Boyd, 2014).

The novel contribution of this research is that it examines perceptions of how social media have affected gangs, from the perspective of five distinct types of study participants: ex-gang members, gang-affected youth, police officers and criminal justice workers, local authority workers (community safety, education, early help and terrorism prevention) and voluntary sector grassroots workers. This multi-method study used interviews, focus groups and documentary analysis and was conducted in the same London borough as the Pitts (2008) study, thus providing a unique opportunity to look back at how, if at all, social media have changed gang behavior. Our aim was to study the extent to which social media were present in the gang landscape and how they were used by street gangs. We specifically aimed to investigate how gangs approach the opportunities and challenges presented by social media and how they adapt to new digital technologies, neither of which have been addressed in previous research. In our study we found that different gangs in the same geographical space used social media very differently. The current study analyzed what this means for gang activity and the construction of gang territory and gang identity—key defining features of gangs (Thrasher, 1927; Valasik & Tita, 2018). In the following sections we address the underlying theoretical framework and develop the hypotheses guiding the multi-method study presented here.

1.1. Gangs and social media

For over a decade now, gangs have existed in a digital world (for a review, see Pyrooz & Moule, 2019) and gang members have started using the internet to showcase and promote gang culture and construct gang identities (Morselli & Décary-Hétu, 2013; Moule, Pyrooz, & Decker, 2014). Gangs use social media for a variety of reasons (Storrod & Densley, 2017), from reputation building and identity construction (Urbanik & Haggerty, 2018; Van Hellemont, 2012) to posting threats and inciting violence (e.g., Johnson & Schell-Busey, 2016; Lauger & Densley, 2018; Lauger, Densley, & Moule, 2019; Moule, Decker, & Pyrooz, 2017; Patton et al., 2017b, 2017c, 2019). Recent research found that a notable proportion of the violent posturing gangs engage in online does not in fact, lead to real-world violence (Stuart, 2019). Still, for many gang members, the "digital street" (Lane, 2019) has become "as meaningful and consequential as the physical street" (Lauger & Densley, 2018, p. 817), evidenced in more recent studies in this area (Moule et al.,

2014, 2013; Pyrooz, Decker, & Moule, 2015; Urbanik & Haggerty, 2018).

As yet unexplored in the literature is the extent and the ways in which different gangs, especially gangs in close conflict or physical proximity, adapt to social media and why. No two gangs are the same (Thrasher, 1927) and we expect this is also true when it comes to social media use. There are a variety of gang types (Klein & Maxson, 2006) and evidence that gangs evolve over time owing to a combination of internal and external factors (Ayling, 2011; Densley, 2014; McLean, 2018; Roks & Densley, 2019; Thrasher, 1927). Gangs "mature" (Gottschalk, 2007), for example, moving away from youthful, recreational, non-delinquent pursuits (i.e., Thrasher, 1927) to more adult, entrepreneurial, and criminal activities (Whittaker et al., 2020).

The current research, drawing on the perspectives of a variety of gang observers, investigated to what extent the evolutionary stage of the gang, and the age and the seniority of its members, influenced its relationship with social media. Specifically, we were interested in understanding whether there may be a 'generation gap' when it comes to gangs' social media use, and whether early stage gangs and newer gang members with tenuous "street capital" (Harding, 2014) may have more to gain from "signaling" their reputations online (Densley, 2013) compared to more highly evolved, later stage gangs and more senior or established gang members.

Proximity to organized crime may equally affect this relationship with technology, with more criminally embedded or discrete groups saying no to social media because of its inherent capacity to incriminate (Irwin-Rogers, Densley, & Pinkney, 2018). Some gangs may openly use social media as a means of advertising, whereas others may eschew it as attracting unwanted attention. Social media content, such a good rap video, can promote a fearsome reputation that will warn off competitors and create 'brand' recognition for the gang (Lauger & Densley, 2018). However, over exposure online creates online "collateral" (Storrod & Densley, 2017) that is liable to get the gang in trouble, either with rival gangs or with police (see also, Gambetta, 2009).

1.2. Social identity and the sense of belonging in social media

Given that a substantial part of gangs consists of young people in their teens and early twenties (Pyrooz & Sweeten, 2015), it is worth looking into the promotional side of online gang business more closely (Martinez-Ruiz & Moser, 2019). There is a body of research into how social media can provide a platform for self-expression and social interaction (Hall, 2018) that create a sense of belonging and joint identity. Teens and young adults are likely to be particularly responsive to this, not only because they are 'digital natives' but also because they are at a life stage when finding one's identity and place in the world outside of their immediate family is central to becoming an adult (Erikson, 1968; Sudbery & Whittaker, 2018). Conformity with group norms and being accepted by peers can be particularly important at that age and this can be compounded by deindividuation effects of digital media (Kim & Park, 2011; Moser & Axtell, 2013). Teenagers' need to belong for instance has been shown to predict their use of social media and also their willingness to engage in collective action such as flash mobs (Seo et al., 2014).

Social media participation is also central to building a reputation and gaining social status among peers (Bacev-Giles & Haji, 2017), not only but especially for young people. Being liked on social media and having a large online network is often equated with social status among peers, despite empirical evidence that people overestimate online status cues (Bradley, Roberts, & Preston, 2019). Based on this previous research, we assumed that gangs using social media and portraying themselves as attractive in-group and point of social identification for teens (Hogg, 2001) are particularly attractive to that age group also for reasons that are not directly gang related but have more to do with coming of age in a society where social media provide one of the most important platforms for social interaction and self-expression. This, in turn, could feed into a

'generation gap' in gang members' use of social media, with younger and older gang members having different levels of engagement with social media, bearing in mind that group identity, group process, and reputation-building are all central to gangs and in gang research (e.g. Decker, Melde, & Pyrooz, 2013; Densley & Peterson, 2016; Felson, 2006; Goldman, Giles, & Hogg, 2014; Short & Strodtbeck, 1965).

1.3. Hypotheses

According to Bechmann & Lomborg (2013), social media provide two major avenues of value creation: firstly, economic and socio-political value creation by exerting power, exploiting others and creating business revenue; and secondly, value creation as sense-making, by offering opportunities for self-expression and for building and managing social relationships. With this in mind, we advance the exploratory hypothesis that gangs make use of all of these opportunities to create value, but that their specific use of social media depends on the maturity of the gang and its evolutionary stage as well as the gang member composition. We hypothesize specifically that:

H1. older gang members and more mature/more evolved gangs will utilize social media less for their activities because they already have strong reputations, thus have less to gain and more to lose from social media attention;

H2. younger gang members and less mature/less evolved gangs will use the full range of social media opportunities available to build up their reputations because they have more to gain and less to lose from doing so.

To elaborate on the hypotheses, less established gangs have a far greater need to use social media for *both* "expressive" and "instrumental" purposes than their more established counterparts (Storrod & Densley, 2017). First, to create a gang identity and build a reputation by promoting events, music, and videos that speak to their members and provide a social platform for interaction and identification. This can provide opportunities to not only gain members but also to retain them and to advertise events and distribution points for selling drugs and sex. Second, to issue threats and send territorial signals to rival gangs and to establish control of members and distributors on the ground. Social media provide comparatively low risk opportunities to establish new territories, gain membership, and set up drug distribution networks, compared to potentially very costly physical confrontations and controls on the ground (Densley, 2013). If this does not work, less evolved gangs can still revert to traditional, physical means of threat and control and can close down any social media activities quickly.

2. Methods

2.1. The study context

The present study was commissioned by Waltham Forest, the same local authority in London, England, which was the focus of Pitts, (2008) study, after a series of particularly violent gang-related murders, which suggested that there had been changes in how gangs operated that required further research and analysis. The findings relating to general changes in gang composition and activity have been discussed elsewhere (Whittaker et al., 2018). The present research is focused specifically on social media use and gang evolution.

2.2. Research design

The research design was comprised of two-stages and was multi-method, with three distinct research methods: interviews, focus groups, and document analysis. The first stage consisted of qualitative semi-structured interviews (n = 31) with ex-gang members, gang-affected youth, police officers and criminal justice workers, local

authority workers (community safety, education, early help and terrorism prevention) and voluntary sector grassroots workers. This was combined with a document analysis of information from local agencies. Once the entire dataset at stage one was analyzed and preliminary findings were developed, this was followed by a second stage to test these preliminary findings with two large focus groups (n = 19 and n = 18) of key stakeholders from police and criminal justice agencies, local government agencies and the voluntary sector grass roots organizations.

2.3. Sample and participants

The first stage included individual interviews with 21 professionals from the police and criminal justice agencies (24%), local government agencies in community safety, education, early help and terrorism prevention (38%) and voluntary sector grassroots organizations (38%). Interviews were also held with 10 young people, including individual interviews with four males who had very recently left gangs and a group interview with four young women and two young men were not embedded gang members but had extensive knowledge of local gang activity and were recruited by the local authority. Further demographic information has not been provided in order to protect the identity of participants. Former gang members were recruited from local grassroots gang intervention agencies, who had been involved in supporting their recent gang exit.

We have used the term 'former gang member' to denote people who had some level of embeddedness in street gangs within the preceding 12 months and who self-nominated as former gang members. The individuals interviewed represented a range of different gangs and some still retained strong social "ties" to the gangs they had been involved with (Pyrooz, Decker, & Webb, 2014). The study used the definition used in the *Dying to Belong* report (CSJ, 2009) with five key features: A relatively durable, predominantly street-based group of young people who: (1) see themselves (and are seen by others) as a discernible group; (2) engage in a range of criminal activity and violence; (3) identify with or lay claim over territory; (4) have some form of identifying structural features; and (5) are in conflict with other, similar, gangs (Centre for Social Justice, 2009, p.48). This definition was shared with all interviewees to ensure perceptions of 'gangs' were consistent. For a detailed description of the gangs under investigation and the broader contextual factors that lead to gang emergence and involvement in Waltham Forest, please see Whittaker et al. (2018).

In line with university ethical protocols that approved the current study, we were unable to interview any active gang members, and only allowed to include ex-gang members and gang affected youth. This was a compromise over fears that gang members' participation in the study might endanger researchers and interviewees alike. This does pose some obvious limitations which we address in the discussion.

In an effort to address some of these concerns, the dataset was supplemented with a document analysis of data related to gangs and held by local services. This provided useful historical data on specific gangs, spanning over a decade, including previous offences and local intelligence. We took a critical stance towards this data, seeking corroboration through multiple sources and recognized that more recent data was often poorer quality as suspects were becoming increasingly reluctant to self-identify as gang members and actively seeking to hide their activities.

The second stage consisted of two large focus groups (n = 19 and n = 18) with key people from local governmental agencies, criminal justice and grassroots organizations to test the finding from the preliminary analysis of Stage 1. The aim of this stage was to ensure that we were not imposing external interpretations and to ensure that the findings were corroborated by local stakeholders who worked with street gangs on a daily basis.

2.4. Data analysis

Both the interviews in Stage 1 and the focus groups discussions in Stage 2 were transcribed and the resulting data coded using the NVivo 11 qualitative data analysis software package. Data from the first stage were analyzed using a thematic analysis approach developed by Braun and Clarke (2006) as this is an established process to analyze interview, focus group, and documentary data. After familiarization with the data, initial semantic coding was completed across the data set, focused on what a participant explicitly said and/or what was written. Initial codes were then reviewed to identify latent themes—the underlying ideas and assumptions that shape and inform the semantic content of the data-—and to explore the relationship between themes. These themes were then reviewed by the research team to ensure consistency within each theme and across the whole dataset (Braun & Clarke, 2006).

At the second stage, the process was repeated as data from the focus groups were analyzed using the same thematic analysis approach. The coding for the data from the first stage was reviewed and recoded in the light of coding from the second stage. At both stages, the research team found acceptable levels of agreement between different participants, despite the diversity of their backgrounds. The resulting themes are captured by the different subheadings in the Findings section below.

2.5. Ethics

Ethical approval was obtained from the first author's university ethics committee. Note, any research on gangs that leaves out crime "leaves out a critical part of the phenomenon" (Sánchez-Jankowski, 1991, p. 16), but we were very clear with our interviewees that we would never disclose identifying details of criminal activity (e.g., dates, addresses, and victim profiles) and in line with ethical requirements we have written up the findings responsibly to ensure they do not become a blueprint for how gangs *could* use social media to advance their material personal interests. This is information gang members and practitioners already possess and could have reported if they were so inclined.

Like in Pitts. (2008) study in Waltham Forest, interviewees were identified and accessed via a combined purposive and snowball sampling technique that started with frontline practitioners in outreach projects acting as gatekeepers. Participation in the study was voluntary and predicated on the active and informed consent of all research participants. All research participants were informed about the procedures and risks involved in the research and appropriate steps were taken to mitigate any risk of harm pursuant to their participation. For example, great care was taken to protect the confidentiality of all participants, particularly the former gang members because of the (albeit minimal) risk of retribution. This included separate interviews in settings that participants felt were safe for them. We have used the real names of the gangs in the borough in this paper, but these are well known already also in the general media and in research (see Whittaker et al., 2018) and in a borough comprised of 275,000 residents plus many more commuters and tourists, chances of identification are slim. Transcripts were carefully anonymized and, to protect respondents' identities, only restricted demographic information about the participants has been included.

2.6. Findings

The central overall result of the current study was that gangs demonstrated a sharp division in their attitudes towards and use of social media which could be clearly identified as two types of adaptation to social media. Whilst some were 'digitalists' who embraced technology as a means of conducting business and developing the gang's identity, others were 'traditionalists' who eschewed social media as too risky and 'bad for business'. Further key findings were a noted difference between younger and older gang members in their relationship with social media and the fact that social media completely changed the traditional meaning that territory for gangs. Below the results are presented

according to these central categories identified in the data.

2.7. Logged off: the 'traditionalist' Model of Gang Adaptation

Some gangs in the study adopted an operating model that prioritized maintaining a low profile to avoid police attention and to reduce the risk of evidence that can be used against them. A former member of one of the most criminally embedded gangs in the area, the Mali Boys, confirmed this attitude towards social media:

No, no, social media definitely don't play no part because everyone keeps away from social media … [Mali Boys] keep away from social media, yeah. Everyone keeps away from social media to be honest because they are paranoid of the state. The police can go through your phone, this person can go through your phone … do you know what I mean? (Participant 28, ex-gang member).

As well as concerns about smart phones that can be used as evidence following arrest, there were other examples of gang members being caught out through social media. For example, a criminal justice professional described visiting a family about concerns that a young boy was involved in a local gang:

We go round there and see them and their mum, I say … we're concerned about your 13-year-old son and the mum says, my son's not in a gang, you're just picking on him, which often happens. I say, 'well this is my laptop, have a look at this YouTube video and tell me if you recognize anyone in this' and there's her son, at the front, spliff in his mouth, holding a knife, hood up, I'll 'F' you up. (Participant 16, criminal justice sector professional).

Of course, featuring in or sharing a YouTube video—even with claims of 'gang life'—is not a legitimate or concrete indicator of real-life gang involvement, and should not be interpreted as such by law enforcement (Lane, Ramirez, & Pearce, 2018; Patton et al., 2017a). Prior research demonstrates a gap between gang impressions and presentations online and actual gang behaviors (Stuart, 2019; Urbanik & Haggerty, 2018; Van Hellemont, 2012). Still, law enforcement agencies had used information collected from social media platforms in order to track perceived gang membership and activities (see Densley & Pyrooz, 2019). For example, there had been a period when police officers discovered that Facebook could be used as a means of gaining intelligence information about potential gang members and their associates:

At one stage you could get loads of information from that because it had a list of all their friends, their profiles were open. And then they just, it just all got shut down and then basically you've lost all that information so it's, there's a period where they're utilizing it, law enforcement catches up to that, catches on, there's a period when they're like actually it works, law enforcement is brilliant and then they change their use of it and they don't post stupid things on social media now (Participant 12, local government professional)

This incident had contributed towards Facebook being referred to as 'Fedbook' (Densley, 2013, p. 99).

Surveillance and use of social media by law enforcement and criminal justice practitioners has changed over the last ten years, shaping some of the perceptions discussed herein. In the past, when police were unable to follow and watch social media, young people had far more latitude to exploit it for criminal use. But in recent years, restrictions on surveillance have been lifted and supported under the rubric of proactive violence prevention (Densley & Pyrooz, 2019). As police powers increased over the internet, gang members may have gotten wise to this and changed their approach by moving to more private streams. Indeed, the research even uncovered that young gang members working county lines drug deals for gangs that were social media 'traditionalists' were given old style Nokia phones when they were recruited in an attempt to leave less of a digital footprint that could be used as incriminating

evidence, such as photographs. Similarly, young people would receive instructions through telephone calls because text messages were deemed more incriminating.

It is important to not assume that gangs were adopting a 'traditionalist' stance simply because they were not tech savvy. The gang that best exemplified this stance, the Mali Boys, saw social media as an instrument that could be weaponized either to be used against them or that they could use against their opponents. It could be used against the gang in the sense that it could provide criminal justice agencies with incriminating evidence on their phones. However, the gang could use social media as a weapon against the police in the sense that they used it as an integral part of their surveillance activities on police officers.

Campana and Varese (2018) argue that if a gang can generate fear in a community and corrupt legal figures then it is beginning to 'govern' illicit production and exchange. The Mali Boys, a gang that has evolved from a reactional gang into a serious organized crime group (Whittaker et al., 2018)), used social media to gather information about the personal lives of police officers, which they could then use to intimidate individual officers. This was confirmed by a senior police officer:

> But the Mali Boys seem to have a business model and are a much more professional outfit. And that manifests itself in many different ways, such as the intelligence collection they do on officers. So they try and intimidate officers by collecting number plates etc and going on social media. (Participant 11, criminal justice professional).

The Mali Boys also used mobile phone technology to place spotters at strategic places to warn others of any police presence. In order to be successful at this stage of gang evolution, the Mali Boys needed to have to have an informational advantage in order to stay one step ahead of any rival gangs and the police.

2.8. Logged On: The 'Digitalist' Model of Gang Adaptation

During the study, the use of social media platforms such as Snapchat and Instagram were described as being some of the new tools that gang members use to communicate with each other:

> Social media's enabled people to communicate. I mean originally, it was more around people using BBM to message people but it's much more sophisticated now so I'm just wary of that, every young person's got a smart phone. (Participant 9, pan-London criminal justice professional).

But more than that, the second model of adaptation, 'digitalist,' was one where gangs embraced social media and used it as a means of promoting the gang, including their drug dealing activities:

> Yeah, back in the day it was different, it was different. Nowadays people are getting … everyone's watching their videos of gangs so they want to be involved in it. (Participant 27, former gang member).

One of the main gangs using this approach is the DM Crew (originally named after local areas that they controlled but also known as 'Dangerous Minds'). This gang is relatively new, to the extent it was not identified in the original Pitts (2008) study of the borough. During the period of the fieldwork, members of the DM Crew were featured in a music video on well-known former BBC Radio DJ Tim Westwood's YouTube channel, which has 1 million subscribers. Other newer, less evolved gangs, such as Chingford Hall and Priory Court also have a notable internet presence on social networking sites.

Gangs have increasingly realized that more open social media platforms such as Facebook could be used as evidence against them, so they had learnt to use end-to-end encrypted forms of social media such as Snapchat, as well as closed groups in WhatsApp, as a means of communication because they are aware that these are less likely to be monitored by law enforcement agencies. Gangs took advantage of the temporary nature of images in social media platforms such as Snapchat

to advertise the sales of drugs without leaving incriminating evidence:

> They use Snapchat to film and sell what they're selling. So it might be that they've got some drugs that they want to sell and they might publish that on Snapchat: 'So this is what I've got at the moment', so that people can see what they can buy (Participant 8, local government professional).

Gangs that have embraced social media and technology more broadly have also realized its potential for exploitation and coercive control. GPS location tags and popular apps such as Find My iPhone or Find My Friends were used to keep junior gang members in constant contact, particularly as they travelled far from home per the county lines model of drug dealing. Junior gang members may be asked by senior gang members to provide photo or video evidence of their journeys, their surroundings, and their activities. This round-the-clock surveillance, known as "remote mothering" but tantamount to remote controlling (Storrod & Densley, 2017), makes it difficult for young people to focus on anything other than the gang or to seek help without arousing suspicion from gang leaders.

Practitioners described how they struggled to keep up with the rapidly evolving nature of technology and social media:

> The older generation or people who are just law enforcement aren't up to date with the youngsters of today about what's happening and going on … There must be communication in some way, how they're doing that is a bit of mystery because if it's, if you're not being exposed or given that information you're never going to know kind of thing (Participant 12, criminal justice professional).

> It's trying to keep up with them, we'll never be ahead of them, they'll always be catching up with it and I think we were slow with the social media kind of thing (Participant 16, criminal justice professional).

It might seem that the two approaches are incompatible, and it would be difficult for gangs with different orientations to work together. However, the DM Crew were part of a business alliance with the Mali Boys, working under their umbrella while maintaining a separate identity.

2.9. A generation gap?

Some of the findings above can be explained by differences between younger and older gang members in their roles and approaches to social media. As observed in prior research (Storrod & Densley, 2017), videos posted on YouTube tend to feature younger, more junior, gang members, who have most to gain in establishing their reputation. The videos tend not to feature the most senior members of the gang, who have already established their reputations and prefer to maintain a low public profile to avoid police attention. One participant stated:

> Notably you don't get the upper gang members in the pyramid featuring, it's all the lower tier (Participant 16, criminal justice professional).

Participants explained this difference between younger and older gang members in terms of their motivation:

> The olders were making money, you recognized that but … for the youngers it's all about respect (Participant 47, grass roots organization professional).

> It's about money for elders and that money is kept coming in by control and status but the youngers, they just want the status. And if they thought more about the money then maybe they wouldn't behave in the way they do because stabbing someone over stepping on your trainer or looking at you in a funny way is going to send you to prison and you're not making any money, so I think they've yet to grasp that concept (Participant 7, voluntary sector professional).

Some of this carried over to the age of gangs themselves. For younger gangs, social media provide a means of enhancing their 'brand name',

enabling them to increase awareness of their products in drug markets, recruit junior members and protect their markets against other suppliers. One participant explained how social media make drug markets attractive to others as part of a wider materialist culture:

People just watch social media and want to be like social media … The drugs culture for me is what we see on social media, everybody wants money, it's materialist, innit? (Participant 20, former gang affiliate).

Storrod and Densley (2017) identified a recent trend with London gangs reaching out beyond their localized social networks to a larger digital audience by posting 'trap rap' videos (a form of hip-hop music that focuses on drug dealing from 'trap houses') on YouTube. They studied videos from a number of different London gangs, including videos of gang members going out 'on holiday' to seaside and rural towns as part of developing county lines operations (Coomber & Moyle, 2018). The first purpose that this served was to scare and warn off existing local drug suppliers. One criminal justice professional stated:

A lot of these YouTube videos show these kids in London gangs being very, very aggressive, very, very threatening so if you are some kid from Ipswich watching YouTube, which is what they do, and you see the Chingford Hall, one of their videos saying we've got guns, we've got knives, we do this and then you hear on the street that they're the ones coming out selling the drugs, you are going to shit yourself and stay away … So definitely it is money motivated, the demand's there, they supply it and the lack of strong opposition in those areas to do it (Participant 16, criminal justice professional).

The second purpose of these videos was to advertise their products to potential local customers through promoting the 'brand identity' of their drugs business. One former gang member argued that rap music served to 'program' young people, drawing them in and provoking ('gassing') them into an overexcited state:

And the worse thing about it: they've got their headphones into you, twenty-four hours a day. As soon as they wake up, slap on their stereo. They start programming. Especially when you're waking up every morning; you put your stereo on and you're listening to the gang music. When you leave your house, you've got your headphones in and all you're listening to is, 'Stab man this … ' 'Rob man that … ' 'Selling this', 'Selling that' … And you're getting gassed, just being hooked (Participant 29, ex-gang member).

The jury is out whether gang music is directly related to acts of violence (Kubrin & Nielson, 2014; Stuart, 2019), but the participant went on to describe how they felt that this creates a mind-set that is advantageous to gangs because it recruits young people into the business of the gang:

And then, all of a sudden, you've got this negative mindset where you genuinely feel like – to yourself – 'All I can do is sell drugs. I can't get a job.' And you think to yourself … But, when you look at that person, you think, 'You haven't applied for a job yet.' 'You've never, ever applied for a job but you feel like you can't get one. Why is that? Because of the shit that you're listening and programming yourself with is telling you (Participant 29, ex-gang member).

2.10. The changing nature of gang territory and street capital in the age of social media

Territory has always played an important role in the history of gang life (Valasik & Tita, 2018) and the development of the internet has provided a virtual space in which gang members can interact and foster collective identity without the need for face-to-face interactions (Lauger & Densley, 2018; Stuart, 2019). A decade ago, Pitts (2008) found that London gangs used color codes and other conventional signals to display their identity. With the advent of social media, gangs no longer needed to "represent" in person — gang identity was now communicated online:

*' … they all had their own colors, they'd wear bandanas and such like and also graffiti, you'd get tags marking out areas and so on. You've seen a decline in both of those things because of social media, so you don't need to, you don't need to walk around with a red bandana on writing Chingford Boys E4 on walls everywhere because all you do is film a grime track which is the genre that they identify with at the moment and the lyrics, when they are MCing the lyrics, are all about territories, access to firearms, how much money they're making, how they get the girl, how they're going to shank you if you come in their area and such like and that's viewed by hundreds of thousands of people globally. They all know each other's faces, they all know who's who via social media so that's why you don't see colors anymore' (*Participant 16, criminal justice professional).

Gangs identify with a specific territory but this can be in a symbolic rather than a physical sense. For example, one of the most well-established gangs, the Beaumont Crew, strongly identify with the Beaumont Estate but a regeneration of the estate has meant that very few members physically live there today. It is a symbolic rather than an actual reality and a 'brand identity' representing their history and strength.

As Fraser (2015) observed in Scotland, our respondents argued that teenagers are less likely to "hang about" in the streets today than in years past owing to the growth in technology like social media. A decade ago, young people earned gang reputations and "street capital" on the streets via public acts of crime and violence (Densley, 2013; Harding, 2014). Today, it seems new entrants into the gang game were more likely to supplement any physical action with virtual content intentionally curated to help build status and gain peer recognition. In other words, social media have changed the "routine activities" of gang youth (Pyrooz et al., 2015), to the extent that creating a continuous stream of content (i.e., attractive posts and events) for broad consumption is now one of the duties of gang membership. Such activity makes gang 'territory' more fluid than ever. However, physical territory often features in gangs' social media content, participants argued, such as when members film themselves hanging out in expected surroundings or encroaching upon rival territory and vandalizing their property (Densley, 2013). Such action is unnecessarily risky for older gang members with banked street capital, said our interviewees, but for younger gang members with a point to prove, this is precisely the sort of content that could propel them to instant stardom on the streets.

Still, even older gang members are sensitive to public insults (Lauger, 2012; Papachristos, 2009), thus if their status or turf is threatened or insulted online and they cannot sufficiently defend themselves by digital means, then the sense of humiliation and shame could mount (Scheff & Schorr, 2017), provoking a violent physical response. When actual violence happens, social media provide bystanders with the means of sharing video footage at no cost to themselves, which can lead to a vicious circle of intergenerational violence—something that was actually occurring in Waltham Forest at the time of the study. Slightly over ten years ago (Pitts, 2008), fights between street gangs would have had a limited number of bystanders and after a violent confrontation, gang members would be able to portray the conflict in ways that helped them save face, avoid embarrassment and preserve their reputation. Social media have changed this completely, with the possibility for almost anyone to share and upload content instantly and bring a wider audience to interact with gang territory.

3. Discussion

The current study examined the ways in which social media have influenced changes in street gangs and found a clear distinction between 'digitalist' gangs who embraced social media and 'traditionalist' gangs who avoided social media. This is an important contribution because

there is an assumption in the existing literature that gangs have uniformly embraced social media (Moule, Pyrooz, & Decker, 2013). Further, how gangs adapt to social media appears contingent upon their level of maturity and evolution, with younger, less criminally involved groups openly using social media as a means of advertising, while older, organized crime gangs eschew it as attracting unwanted attention. The findings thus confirm our exploratory hypotheses about gangs' differential adaption to social media. Thrasher (1927) was right, no two gangs are just alike, including when it comes to social media use.

The findings also compliment those from prior studies insomuch that there is evidence that social media can promote a fearsome reputation that will warn off competitors and create brand recognition of the illicit goods and services that the gang provides to potential customers. However, content posted online tended to feature junior gang members, who, like professionals on LinkedIn or celebrities on Twitter, had the most to gain from building their brand and "signaling" their reputation (Densley, 2013). Senior gang members, by contrast, preferred to maintain a low public profile to avoid police attention (see also Disley & Liddle, 2016).

The division between junior and senior gang members can be understood as two forms of value creation via social media as proposed by Bechmann & Lomborg (2013). Since more senior gang members have established their reputations and are receiving greater financial rewards, their motivation to use social media appear to be more about economic and socio-political value creation by exploiting others and creating business revenue. Junior gang members have yet to establish their reputations and are receiving smaller financial rewards so for them social media provide a means of value creation as sense making through opportunities for self-expression, including shared social identity, friendship and revenge.

4. Limitations

As always, there are a number of limitations to this study. Firstly, our sample of gang youth is small and while the current study draws on the perspectives of police officers, local authority workers, and others, the information obtained from them is indirect data about how gangs use social media. Different viewpoints provide an important check on validity, but criminal justice professionals are not always best-placed to speak to how social media has affected gangs. For ex-gang members, there are typical problems of *post hoc* recall. The rest of our sample can really only reveal perceptions relating to gangs' social media use. Of course, narratives *about* gangs do not always accurately depict the reality of gang life (Lauger, 2012). Law enforcement in London has been criticized for overinterpreting social media postings by youth who are alleged to be gang-involved (Amnesty International UK, 2018), and misunderstanding may be particularly acute for youth of marginalized and racialized backgrounds (e.g., Patton et al., 2017a). Owing to our approved ethical protocols and an obligation to keep study participants safe, interviews with active or embedded gang members were not permitted this time, but we hope future research can capture this vital perspective.

Secondly, the study is a 10-year transversal follow up study of gangs in the same area of London as Pitts. (2008) study, rather than a longitudinal study with the same individuals. The current study thus provides a second snapshot in time, which coincided with the incorporation of social media into gang life. This allows us to compare gang functioning with and without social media, but it is obviously an imperfect design in this sense.

Thirdly, our focus on gangs in one London borough may limit the generalizability of results, not least because gangs are shaped by their local and national environments. Again, no two gangs are perfectly alike (Thrasher, 1927).

These limitations notwithstanding, we believe the current study provides valuable insights for both academics and practitioners on gang strategies of social media adaptation. It certainly raises many important

and empirically interesting questions about differential adaptations to social media, which we hope will feature in future studies of gangs.

4.1. Implications for research and practice

One of the main implications for policy is that criminal justice and related responses need to consider both 'traditionalist' and 'digitalist' orientations of gangs towards social media. A senior police officer described their response to monitor social media daily in order to identify developing conflicts between gangs:

We capture all the videos now, the gang videos … we constantly monitor social media. And it's good for us to monitor those because if we see a group on a particular patch talking about mouthing a group, you know, the gang that there are next door, we can tell that there's going to be issues and so we police accordingly. (Participant 9, pan-London criminal justice professional).

They went on to describe how they responded:

We deploy mediators, we gate-keep the forms which the detectives send through to us and then we send it out to mediators so they literally knock on the doors and say guys, you know, the fall out, what's the issue? We're not going to tell the police, it's really about stopping the conflict, so as long as they don't stab each other, we're well aware that they might still go out and do all sorts of other activities but what we're trying to do is stop retaliatory stabbing or a fatality. (Participant 9, pan-London criminal justice professional).

New Scotland Yard has subsequently set up a specialist unit to tackle gang-related social-media activity that monitors social media and offers mediation. Lane (2019) talks about the merits of such an approach in detail, but a former gang member in our sample outlined how mediation might be effective:

I think if there is mediation, someone from that area comes along to talk because more times, they don't really hate each other until it becomes too late and they actually build a hate for each other when someone has done something to you. (Participant 27, former gang member).

Recent research suggests that when law enforcement and social services monitor social media for warning signs of escalating tensions between rival gangs, the escalation of violence can be interrupted (Patton, Eschmann, Elsaesser, & Bocanegrad, 2016). Online gang activities are also now used to add names to New Scotland Yard's database of purported gang members (the "Gangs Matrix") (see Densley & Pyrooz, 2019). While this can help flagging individuals who might benefit from mediation or social service intervention, civil liberties groups and internet scholars caution that social media are becoming a means of surveillance and intelligence gathering for control agents, with the danger of activities on social media creating guilt by association (Lane, Ramirez, & Pearce, (2018); Patton et al., 2017a). Lest we forget, making a music video and uploading and sharing online is an everyday pursuit for many young people. The majority of youth who do so are not gang members or committing any crimes, yet they are increasingly rendered as troublesome and subject to suspicion and censorship.

Still, the internet is here to stay and social media continue to be a vital component for criminally-involved individuals and groups, including gangs. This research contributes to our understanding of how this happens by examining how gangs use and adapt to social media and how this relates to gang member composition and gang evolution over time. This knowledge is vital for gang scholars, law enforcement, and youth safeguarding, and equally contributes to research on the impact of computer use on individuals, groups, and society.

CRediT authorship contribution statement

Andrew Whittaker: Conceptualization, Methodology,

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