Youth Gangs in an English City: Social Exclusion, Drugs and Violence  
Judith Aldridge & Juanjo Medina  
University of Manchester  
Research report  
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1. Background

When we began planning this research seven years ago, in the UK there was: (1) increasing media attention toward gangs; (2) some historical or outdated research accounts suggesting gangs have long existed in the UK; (3) a denial, nonetheless, by many academics, practitioners and policy makers of a gang problem, resulting in inadequate theoretical understanding and policy treatment; and (4) emerging indications that between the media hype and this denial, changes around gangs were taking place.

Since our research began, both policy makers and academics have become more sensitive to gang problems, particularly lethal gun and knife violence. There is, however, still reluctance in some quarters to talk about gangs – understandable in a context of increased criminalisation of young people and where this ‘gang talk’ is seen as part of a long history of moral outrage at how the poor live. The current Prime Minister has initiated the Tackling Gangs Action Programme to identify good practice. The policy focus seems to be shifting from the antisocial behaviour of groups of young people, as evidenced in the demise of the ‘Respect’ working group, to the more serious violence of more stable groups of juvenile offenders. Recent research is now expanding our knowledge about UK gangs. A few studies (including our work with the Home Office) have documented the prevalence of gang ‘membership’ and its relationship to offending (Sharp, Aldridge & Medina 2006; Bradshaw 2005, Bennett & Holloway 2004, Communities that Care 2005). Emerging qualitative research is also enriching our knowledge of this phenomenon in different British cities and its link to social exclusion (Pitt, forthcoming, Youth Justice Board 2007, Maher 2007, Kintrea 2007, MacDonald & Marsh 2006). Debate continues between those who argue that UK gangs are a new phenomenon arising from changing social conditions and the ‘ghettoisation’ of certain parts of Britain (e.g. Pitts 2007); and those who, recognising the effects of increasing polarisation, maintain that what has changed primarily is the spread of the use of the gang label by academics and others (e.g. Hallsworth 2006).

2. Objectives

Original:

1. Produce an ethnographic account of contemporary street gangs in the UK. Objective met.  
We conducted our fieldwork successfully after initially problematic access due to changes in Research City (see the section on Difficulties in the End of Award Form) occurring just prior to fieldwork. Our results are summarised below. Our research experience can be used to modify the Eurogang Network’s Guidelines for Gang Ethnographic Research.

2. Contribute to a theoretical understanding of gangs that modifies and extends existing explanations that have primarily been developed in the US. Objective met. We have contributed to theorising about gangs in several ways. (1) Much gang research focuses on young people primarily qua their criminality. Our findings about
taking pleasure in the illicit will help to bring gang theories and British cultural studies explanations closer together. (2) Some argue that the shorthand ‘gangs’ simplifies and stereotypes the experiences of socially excluded, ethnic minority youth. Our findings illustrate how official responses may reinforce widespread assumptions about ethnicity and gangs. (3) Our findings about the rich, multilayered relationships between gangs and their communities, and the numerous grassroots efforts to tackle them question collective efficacy and social capital explanations of crime. (4) Our findings about the relative lack of gang cultural identifiers within Research City gangs and the commonalities between them and other youth networks problematise the notion of the gang as a qualitatively different kind of youth formation.

3. **Contribute to the understanding of appropriate ethical procedures for conducting research with delinquent children and youth.** Objective *met*. UK guidelines for studying criminal networks, particularly youthful ones, are insufficiently developed. We have developed protocols related to maintaining the security of digital qualitative data, interviewing young people, and ensuring the safety of fieldwork personnel. These have been taken up as a model of good practice by the University of Manchester Ethics Committee. Further details are described in *Ethics* and we plan to submit an article to *Sociology* on digital qualitative data security.

4. **Establish a dataset that can at a later stage be employed as a basis for cross-national comparison.** Objective *partially met*. Our research employed Eurogang protocols to allow us to engage in cross-national comparisons. Indeed, the work we have done towards producing a consortium of international research partners and a robust and highly appraised research design (see Objective 6) means that this possibility is even more likely. Our original plan was to archive our data with the UK Data Archive. As we describe in *Ethics* their sensitivity requires such substantial anonymisation that only impoverished and potentially misleading data would remain. This sensitivity resulted from our success in gaining the trust of key informants and having them talk in detail about serious events. UKDA staff agrees that this poses problems for public archival and are considering a request for a waiver to the obligation to deposit the data with them. Our results can still be used by others to make cross-national comparisons.

5. **Provide policy makers and practitioners with information that can be employed to develop strategies and interventions to deal with young people and gangs.** Objective *met*. We organised a national conference for dissemination to practitioners. As described in *Impact*, we are already engaging in meetings with the Home Office, Metropolitan Police and others to discuss our results.

Additional:

6. **Develop a proposal to be submitted to the European Commission Framework Programme 7 for cross-national research on youth gangs.** Objective *met*. The ESRC extended (£8,560) our project to allow us to prepare an EU bid. The Commission have indicated that the proposal is most unlikely to be funded under this call, but have strongly encouraged us to resubmit the proposal under upcoming calls.

3. Methods

Our study employed participant observation, individual interviews, and focus groups, and used administrative data to contextualise our qualitative findings. As is typical with
ethnographic research, we modified our original design in response to our emerging understanding and to changing circumstances in Research City.

Our original plan to select three gangs was modified due to the particular nature of these groups and as a consequence of our successes and failures in negotiating access. In the end we worked in six different areas of Research City and managed varying access to six gangs. These six gangs differed in terms of their longevity, their ethnic composition, their public profile, and to some degree their type of criminal involvement. This well reflected our aim to represent diversity. For simplification and added confidentiality, here we cluster these areas under two labels: (1) Inner West, a corridor of historically marginalised areas with a substantial black population and a recognised gang problem that has resulted in a sequence of lethal shootings; and (2) Far West, a large, predominantly white council estate with a gang problem that is not officially recognised.

Participant observation involved 26 months of (1) engagement in community activities and events; (2) volunteering in youth centres, community groups concerned with gang violence, and ‘independent advisory groups’; and (3) socialising with gang members and associates, ex-gang members, and others in the community. This resulted in data in the form of fieldwork notes based on observations and informal interview over the period. Building up trust took longer than anticipated; we were reluctant, once having achieved this, to stop collecting valuable emerging data. This extended data collection was resourced separately.

The social use and looseness of the term ‘gang member’ made it difficult for us to follow our original design, which clearly distinguished between gang members, and former gang members. We found that leaving a gang was a gradual process, incorporating both subjective and behavioural changes, and recognition from others. It was, therefore, not always feasible to establish clearly current versus former status. Equally, the notion of ‘membership’ as we will discuss below, is problematic. We sampled ‘gang members’ (where we had no doubts about involvement in gang activity either currently or in the past) and ‘gang associates’ (friends, girlfriends, and relatives). We also conducted interviews with ‘key informants’ (e.g. youth workers, police intelligence officers, community activists, council officials, prison officials, etc). Our original proposal aimed to conduct 110 interviews. With our modified sample we formally interviewed 40 ‘gang members’, 46 ‘associates’ and 21 key informants, totalling 107 interviews. We conducted nine focus groups: three with non-gang youth, three with parents, and three with agency and community representatives.

Interviews were transcribed and coded thematically using Atlas.ti. We identified a series of super-family codes based on our thematic research priorities, alongside inductive coding resulting in near a thousand codes.

4. Results

4.1. History in Research City

We use ‘gangs’ to refer to youth groups that are durable, street-orientated and have a group identity for which involvement in criminal activity is key. This sort of youth formation is nothing new. There are reports of fighting youth gangs in UK cities going

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1 Including populations of both Caribbean and African descent.
2 Gang members were never recruited through criminal justice contacts or in criminal justice settings.
back to the 19th century (e.g., Davies 1998). This is not to say that nothing has changed in recent decades. In Research City, changing opportunities in the formal and informal economies, the spread of new youth cultural styles, access to real and replica guns, and a new willingness to use the term ‘gang’ by authorities and the media, have all led to changes in youth gangs. Research City, like other British cities, has a long-standing history of territorial and fighting street gangs in socially excluded areas. These gangs started to receive attention during the late 80s and early 90s as some groups in Inner West became involved in the retail sale of heroin and crack in open street markets - becoming what the American literature describes as specialty gangs focussed on drug dealing. The profit generated from drug sales led to a ‘gangsta lifestyle’ and was linked to a greater access to guns for self-protection. This erupted in a sequence of shootings resulting in the death of gang-affiliated individuals. Changing market conditions and successful police operations disrupted these drug gangs and changed their ‘specialty’ status, but, as we found, did not heal the wounds of the violence nor eliminate gang presence from this area. Today, unresolved tit-for-tat violence continues and we find a small but growing use on the part of street gangs and youth more generally of both native and imported gang cultural identifiers.

4.2. Structure and membership

In Research City today gangs are fluid, loose, messy and interlinked networks that share with gangs elsewhere ‘ephemeral leadership, high turnover, and only moderate cohesiveness’ (Klein and Maxson 2006:164) and far less organisation than expected (Howell, 2007). Leadership was generally unstable, shifting and shared, calling into question the wisdom of policy interventions that assume otherwise. As with previous US research, our data suggest that gangs are not formal organisations; the term ‘membership’ is convenient, but carries potentially misleading implications about the nature of these groups. As we found, gangs are very much like informal friendship networks whose boundaries vary according to whom you ask in the network. Indeed the notion of ‘membership’ was somehow alien to the vocabulary of young people we interviewed. Gang ‘members’ did not only socialise or ‘chill’ with other gang members but also included in their social networks others who not only did not see themselves as gang members but who had a different normative and behavioural orientation towards crime. This is important since socialising with gang members is considered by the intelligence community, and rival gangs, as a key indicator of ‘membership’.

The American literature shows that generally the process of joining a gang is consistent with the formation in the early to mid-teens of neighbourhood or school friendship groups; only in a minority of instances does anything resembling ‘recruitment’ takes place. Our data are highly consistent with these observations; ‘to join’ a gang generally simply involved developing a different kind of relationship with existing contacts. Self-protection, labelling and taking advantage of illegal opportunities were important factors in this process. However, whilst some research on American gangs suggests that the vast majority of gang members report some sort of initiation ritual, we failed to find much evidence of these rituals. Similarly, other ‘gang’ cultural identifiers such as colours, tattoos, hand signs, verbal references to rules of conduct, role differentiation within the gang, or organised meetings, are much more common in American gangs than European and British ones, as we and others have found. We observed early indications that this may be changing, however. Native and imported gang cultural identifiers appeared to be increasingly penetrating the discourse of some young people and this culture is increasingly being reproduced through the internet, particularly social networking sites.
4.3. Ethnicity

UK surveys have failed to find a significant relationship between ethnicity and gang membership. Indeed, our ethnographic data suggest that gangs in Research City were generally ethnically mixed, tended to reflect the ethnic composition of their areas, and also arise in predominantly white areas. However, it was only the gangs from areas with a proportionally higher black minority that received media and policy attention. This was legitimised by local government and law enforcement on the basis of the demonstrably greater risk for gun violence in these areas. The local official definition of gangs only recognises those that engage in serious gun violence. Understandable as this may be – particularly given the problem of gang over-identification – it also raises significant problems for race relations. An unintended consequence of this policy was the observed greater vulnerability of black young people to aggressive and intrusive policing strategies, resulting in perceptions of discrimination that are counterproductive for the legal socialisation of children (Fagan & Tyler 2005).

Leaders within black communities found themselves between a rock and a hard place. On the one hand, their acknowledgement of the serious gang violence in their communities: 1) was perceived as empowering (i.e., opening the possibility of being given a voice, perhaps making it easier to get attention and resources); 2) recognised the jurisdiction and responsibility of the community to deal with the problem; and 3) opened discussion of community problems like bad parenting, lack of opportunities for young black males, racism, and police harassment. On the other hand, it was recognised that highlighting the ethnic dimension: 1) reinforced negative stereotypes about black people; 2) perpetuated the notion of a ‘suspect’ community; 3) opened the door to simplistic and essentialist explanations; and 4) gave authorities an ‘easy way out’ (i.e. ‘If it is a cultural problem it is the community’s responsibility and is not about resources or institutional racism’). Alongside all this, community activists from predominantly white areas with gang problems complained of discriminatory neglect and deliberate silencing of their problems as a corollary of the marketing of regeneration schemes in their communities.

4.4. Violence and weapons

We found that gang members did not specialise in violence, but that violence played an important role, particularly in symbolism and rhetoric. However, the notion of the gangster as trigger happy and dominated by an aspiration to protect a tough reputation contrasted with numerous instances in which alternate conflict resolution techniques were employed.

In Research City, references to violence and exposure to violent events as victims, perpetrators and witnesses, was part of everyday conversation and of growing up for many of the young people we spoke to. An important conclusion is that unrecognised trauma provoked by this violence does not receive sufficient policy attention locally or nationally. In Inner West, this often involved references to shooting events that occurred during our time in the field. In Far West, the culture of violence seemed to be governed by slightly different rules insofar as it valued the masculinity of physical fights or being ‘handy’, as opposed to the ‘cowardly’ resort to guns. Access to guns (both real and replica) however was common across all our sites.
Despite the common view that gang violence is closely linked to disputes about the control of drug markets, we found little evidence of this. Even in the late 1980s, heyday of the Inner West drug gangs, most within- and between-gang disputes, as also reported about gangs elsewhere, emanated from interpersonal disputes regarding friends, family and romantic relationships. Ethnic tension did not emerge as a significant source of violence either. Although many members highlighted loyalty and the gang as a source of protection, we found a considerable degree of within-gang conflict. Jealousy and debt were important sources of this sometimes violent within-gang conflict. Supporting the notion of crime as social control (Black, 1983), a key source of violent conflict arose because of ‘vendettas’ resulting from unsolved murders that occurred even a few decades prior to, as well as during our research.

4.5. Drugs and the informal economy

Drug dealing is popularly seen as the dominant, almost defining gang activity. Researchers have identified elsewhere gangs with this specialist status, but these are rare. Although some gangs in Research City had this specialist status in the past, this does not seem to be the case today. Three separate developments resulted in the transition of these gangs from drug specialists: the change from open to closed markets, facilitated partly by mobile phones; successful police operations; and the reduction in availability of large sums of money from other illegal enterprises to fund multi-kilo drug purchases. Most gang members we spoke to were involved to some degree in dealing even if their gangs did not specialise in this way. Drug sales now appear to be fundamentally an individual activity, not controlled by the gang, although sometimes involving some cooperation and division of labour (primarily between retail level dealers and their ‘runners’).

Gang members earned money from a combination of legal and illegal opportunities in what could be described as ‘cafeteria-style’ earning. An exclusive focus on illicit income is misleading because legitimate earnings (e.g. paid employment, business, state benefits) were as important. ‘Income in kind’ (e.g. living with others without paying rent) was key in getting by day-to-day. Although it is commonly assumed that earnings by gang members are ‘gang’ earnings, this assumption ignores legitimate earnings, most of which did not result from cooperation within the gang, and were primarily individually acquired and deployed. Even criminal sources of income were rarely gang-coordinated, and most involved gang members operating as individuals or in small groups (typically two or three).

Gang activity is popularly seen as lucrative, funding extravagant spending on jewellery, clothes and cars. In Research City, this ‘gangsta’ spending was prioritised by many, but rarely achieved by substantial illegal earnings. Inner West gang members of 15-20 years ago often referred to large incomes of £1-2,000 a week working in open heroin markets. Even then, however, the potential riches these figures may imply could have been more apparent than real. Incomes quoted often referred to turnover rather than profit, were rarely secure and reliable, fluctuated, and tended not to result in financial stability. Indeed, most previously high-earning ex-gang members we learned about, today were in prison or living on state benefit. Criminal income within gangs today was even less, and accrued from a range of sources, with cannabis sales and personal robberies significant.
4.6. **Drug use**

Comparative research has suggested that UK gang members engage in relatively high levels of drug use (Winfree et al., 2007). We found cannabis use to be widespread and often daily for many. We found ‘recreational’ use of drugs like ecstasy and cocaine amongst gang members, even black members who expressed the longstanding view that these were ‘white, middle class’ drugs. All this contrasts with research suggesting abstinence among drug-dealing gang members – although we did find evidence of abstinence 15-20 years ago amongst ex-members of specialist drug sales gangs. We found evidence of the use of particular drugs as facilitators for the perpetration of crimes (e.g., to increase confidence, to facilitate violence, or to relax after carrying out these crimes). This is consistent with the emerging work of Bennett and Holloway (2007) on drug use and offending.

4.7. **Gender**

Whereas police and ethnographic data seem to suggest that gangs are primarily male dominated, most self-report surveys suggest an almost equal level of female gang membership (Sharp et al., 2006). Our ethnographic data, supporting overwhelming evidence from elsewhere (suggesting that gender inequality remains a cornerstone of the urban street scene), indicate that females are seen as playing a secondary role in most of the gangs we had access to. In one of the gangs from Far West we gathered reports of a greater involvement but were unsuccessful in talking to female members. Nevertheless, one of the gangs we approached in Inner West was a specialty all-female gang with a criminal focus on carefully planned non-violent acquisitive crime. Like other specialty gangs, it was smaller, highly cohesive and more organised. Regardless of whether they are seen as members or not, young women are associated with gang members and this association has important implications for their lives. However, we found most agencies and interventions tended to neglect this fact.

4.8. **Lifecourse**

The former Prime Minister identified ‘bad parenting’ as key in explaining gang membership onset. We found many gang members either living in mother-only families or being raised by other, often female, relatives. Family situations were more complex than popular public discourse allows. Families often resisted the involvement of their children in gangs and struggled to cope with it, resulting in strained family relations. Family members, including gang members, often worried about the effects of gang activity on younger children in the household, and complained about the lack of appropriate support from statutory agencies. We found strong family connections within gangs, consistent with research and practice highlighting that having a family gang member is a risk factor for gang involvement. We also found it to be a risk factor for victimisation by rival gangs and targeting by police. Interestingly, family links can extend to rival gangs, and members of different gangs will as children often have played together and attended the same schools. Gang rivalry is therefore more complex and interwoven than it may first appear. This ‘relational closeness’ may partly explain the reluctance to involve legal authorities in conflict resolution (Black 1973).

A consistent theme was the failing of gang members by the education system. Many had poor qualifications and left school early, through self-exclusion, unofficial exclusion (e.g., schools may urge parents to withdraw their child to avoid the stigma of enforced
exclusion) and official exclusion. Leaving school was identified as a ‘critical moment’ in gang involvement.

Most gang members saw their involvement as a transition stage before adulthood. Desistance was a gradual maturational process involving a cognitive element (‘wanting out’), turning points (e.g. fatherhood) and opportunities (e.g. ‘good jobs’). Interventions should support this process, but were found to be insufficient and seemed to emphasise relocation above other key factors. Generally, gangs did not oppose desistance from members. Nevertheless, rival gangs sometimes and statutory agencies more often challenged this process by not acknowledging the changed status; the former through continuing threats and violence, the latter through suspicion and labelling. Moreover, renegotiating relationships with an extensive network of relatives and friends was both difficult and time-consuming. Reputation and embeddedness in local social networks, thus, created additional obstacles for desistance (e.g. requests for conflict mediation or illegal propositions). For those still engaged, their motivation for persistence was more complex and varied. Factors cited included money, loyalty and ties of reciprocity, force of habit, and a more general sense of fatalism and being ‘stuck.’

4.9. Community context

Common accounts of high-crime gang-affected areas as socially disorganised or low in ‘collective efficacy’ fail to capture adequately the multilayered relationships between gangs and their surrounding community, and the numerous grassroots efforts to tackle gangs we have found. In general, gang members and their associates lived in relatively small areas amongst extended family. Relationships in communities were consequently strong, if often problematic.

The numbers of gang members were small, yet they had a large negative impact in and on their communities, both direct (e.g. victimisation, territorial restrictions on mobility) and indirect (e.g., stigmatisation of area and particularly young people). Community members consistently expressed the view that the violence should stop and that local young people should have mainstream aspirations rather than accept a life of crime. But equally, community members did not demonise gang members in the same way that others do; rather, they saw them as victims of the system. It was not surprising then to find a community willing to engage with them to get them away from gang activity, even if these efforts were limited by lack of sustainable funding, appropriate training, organised coordination, support from statutory agencies and opportunities for excluded young people.

As research elsewhere has documented, we found that older gang members were often called upon by local residents and business owners to sort out minor disputes and problems with local young people. These gang members were recognised as a more amenable and effective source of social control in certain instances.

4.10. Responses

In Research City, statutory agencies have almost exclusively focused on gangs in Inner West. The emphasis was initially on police crackdowns of open drug markets and urban regeneration schemes. This emphasis moved to a multi-agency partnership approach that prioritised police intelligence and increased surveillance, community engagement, social prevention efforts to facilitate individual desistance from gang life, and what some in the
community perceived as police harassment (e.g. Stop and Search). As elsewhere, the impact of these efforts has not been properly evaluated. Certainly, gang membership does not seem to have declined and many gang homicides remain unsolved fuelling further conflict and violence in the community. Despite the commitment to partnership work and community engagement and the considerable progress made in this area, serious tensions and mistrust hampering effective practice continues to exist across agencies and between agencies and community groups. Particular sectors such as schools, the health service and the prison service seemed grossly unprepared to collaborate or respond adequately to the problems brought about by gangs. There was more investment and initiatives aimed at gang members in Inner West than other areas; yet these were rarely taken up by the gang members they were intended to attract. We have also encountered a growing concern over the use of official gang databases with information of varying quality about individuals suspected of gang activity. Young people related to gang members, attending the same schools or youth provisions, and living on the same streets were in danger of being classed as a gang member or at least a ‘gang associate’ and subjected to increased surveillance and intervention. The implications for civil liberties of these ‘gang databases’ require the development of appropriate guidelines and procedures for rectification and compensation when mistakes are made. Moreover, the ‘racialisation’ of the official gang definition, discussed above, in conjunction with the increased surveillance of gang associates, and how this is being used to legitimise the over-policing of young black males, remains taboo. In a related fashion, other areas of the city are frustrated that they do not receive enough in the way of funding and policing to deal with gang activity.

5. Activities

As mentioned above, we organised a national practitioners’ conference ‘Dealing with Youth Gangs’ on 6 July 2007, attended by over a hundred delegates, and highly evaluated by them. In preparation for our FP7 submission, we organised a week long meeting in Manchester for our consortium partners and advisors.

6. Outputs

Outputs are available on Society Today (www.esrcsocietytoday.ac.uk). Starred (*) outputs are nominated.

2. * FP7 Proposal ‘A cross-national multi-method study about the reciprocal relationships between delinquent youth groups and social exclusion: lessons for policy and practice’
3. Protocol on Fieldworker Safety
4. Protocol on the Security of Digital Qualitative Data
5. Conference presentations (9) at ESC, BSC and Eurogang Network meetings (www.law.manchester.ac.uk/gangunit)
6. Endnote library of 957 references to the gang literature (including grey literature) for public use. This will be updated regularly during our own use of it as we write for publication.
7. Impact

It is not possible to cite instances of our research results being applied as we are still in an early stage of dissemination. Nevertheless, policy makers and practitioners have expressed interest in our work to inform their practice. To satisfy this interest, we have already held meetings with the Home Office Tackling Gangs Action Unit and ‘Research City’ Council to discuss preliminary results and their practice and policy implications; similar meetings are being planned with other organisations and institutions such as the Metropolitan Police in February, Mothers Against Violence, the Scottish Government, HM Prison service, and others. We anticipate these expressions of interest to increase substantially once our results are publicised nationally in spring 2008.

8. Future research priorities

Studies like ours produce as many questions as they answer. There are a number of areas that we think deserve greater attention in light of our findings:

1. A more systematic analysis of developmental aspects of gang membership is required with British data to identify the factors causally associated with gang membership to target effective interventions.
2. We need to identify strategies for the policing of gangs that are both successful and respectful of civil liberties concerns.
3. More systematic knowledge of the informal economy in gang neighbourhoods is required to understand how it is interlinked with gang economies and legal and illegal economic/employment choices available to young people.
4. What we find from self-report surveys, ethnographic surveys, and police data each lead to different understanding about gangs. We need to understand the reasons for these divergent findings.
5. Gangs emerge under conditions of social exclusion and result in further social exclusion of those individuals and their communities. Cross-national research is essential to understand how different contexts of social exclusion affect, and are affected by, gangs.
References

Youth Justice Board 2007 *Groups, Gangs and Weapons*.
Ethics

We faced two unanticipated ethical problems.

First, only a few months into our fieldwork, an unexpected event put our security procedures to the test. A laptop containing a handful of both digital voice files of recorded interviews – and their transcriptions – was stolen from the home of a fieldworker after a break-in. Our first response was to report the theft to the police and alert the University of Manchester Ethics Committee (to whom we were obliged to report unexpected events affecting ethical aspects of our research). We then set about informing each of the people with whom we had conducted the stolen interviews of the loss. We were fortunate that not one of these interviews (all had occurred early in our research) involved interviewees discussing other people, or highly sensitive events such as those we succeeded in getting data about in later stages of our research. We were also fortunate that our interviewees were all unfazed by the loss, convinced that the laptop’s contents were very likely to be wiped, before being sold on. This event led us to re-think our security procedures. One part of our re-think involved consulting a clinical colleague, who had developed some expertise on data security in relation to data he held about his patients, along with IT people in our own university with expertise on data security. This resulted in a protocol for qualitative digital data that we include in Appendix 1. Our intention is to write an article about these issues for the journal Sociology, with the draft title: ‘The security of qualitative data for social researchers in a digital age’.

The second problem we faced occurred in relation to anonymisation of transcribed interviews. It is considered good practice to anonymise interview transcripts as early as possible into the data collection process to improve data security. This was problematic in our research for a few reasons. First, many of the individuals we interviewed would be recognisable to some others reading even anonymised transcripts because of the – usually well known – events they discussed and the role they played in them. Second, although it is simple enough to assign pseudonyms to interviewees, it was not straightforward to do so with the many scores of references made during an interview to other named individuals, a difficulty further complicated by the fact that named individuals often had one or more ‘street’ names or aliases by which they were known. It was only as our research progressed that we began to match names with aliases; but this process could only ever be partial. For this reason, working out ‘who was who’ could never been done in a final way – essential when replacing names with unique pseudonyms. The only procedure which is consistent is the - admittedly minimalist - approach of replacing all individual names with ‘person name’. Doing so, however, reduces the analytic utility of the interviews. In the end, we were not only unable to complete anonymisation at the early juncture we had planned, but unable to do it in a sufficiently satisfactory way to retain data integrity. Although this was less than ideal from a security point of view, we made use of our updated security procedures to store non-anonymised transcripts for longer than originally anticipated.

We did attempt to produce anonymous versions of the data for the purpose of public archive. However, we did not manage to find a satisfactory way for doing so; unavoidably it resulted in data ‘left’ after anonymisation considerably impoverished, and in some instances actually misleading. In addition to removing specific person and place
names, we also had to black-out sections of text that referred to recognisable events and people, even where specific names were not mentioned. We found that ‘what was left’ amounted mostly to non-specific generalities, and that this kind of talk often contradicted more detailed reporting about specific events elsewhere in the transcript. We discussed these issues extensively with UKDA staff, who agree that the sensitivity of the data poses problems for public archival and are considering a request for a waiver to the obligation to deposit the data with them.

However, there are precedents for sharing data whereby specific use agreements can be individually negotiated. We believe it is important to allow access by other researchers to our data in order to facilitate both secondary analysis and comparative research. For these reasons, we will explore the possibility of negotiating agreements with individual researchers and research teams for them to use our research only under the specific circumstances set out in the agreement. Such agreements would need to be negotiated with institutional ethics committees where the research was carried out, and specify conditions, such as (for example) that data are re-analysed on site.
Confidentiality

As discussed in the Ethics section, our data includes highly sensitive information about individuals and agencies, including copious and detailed references to criminal events. We anticipated at the outset of the project that promising interviewees and others who took part in our research a high degree of confidentiality was key for our success in gaining their trust. As a consequence we promised that in dissemination all references to the city in which the research was conducted would be removed and that substantial effort would take place to disguise the identity of our research sites. This commitment was included in the Ethics Protocol that was approved by the University of Manchester of Ethics Committee for this research project.

We have written the research report referring only to ‘Research City’. However, other parts of this document, in particular sections of the questionnaire on activities and achievements (section 2, 6 and 7) contain information that directly or indirectly may lead to the identification of our research site. We would appreciate if those involved in the review of this material are made aware of our ethical commitments and respect our desire to keep the identity of this research site as secret.
Annex 1

Improving the security of qualitative data in a digital age: a protocol for researchers

Judith Aldridge & Juanjo Medina

Introduction

This protocol for improving the security of digital qualitative research data was developed by Judith Aldridge and Juanjo Medina in the course of conducting the ESRC funded research ‘Youth Gangs in an English City’. This document describes a set of guidelines that were developed after we revised our security procedures after the theft of a laptop containing sensitive data. These take into account the varying forms that digital data are held, the numerous physical locations and storage devices that must be considered, the individuals with a range of roles on a research team, and the phases of research.

Background to the protocol

Our research involved collecting highly sensitive data in the form of interviews and fieldwork notes from gang members and former members, gang associates, and others in the community. After considerable time and effort, we were finally successful in gaining the trust of key actors; we were rewarded in hearing them talk candidly about their own lives and those of others, and about serious criminal events. Should this data be made public, this could result in danger to interviewees themselves or people they discussed, from others in the community or from the police.

The original ethical protocol that we developed in proposing the research addressed issues around securing our digital data. We knew that it was no longer sufficient in a digital age that the ‘locked filing cabinet’ (to store paper copies of data with identifying information) could provide sufficient data security. However, we understood that using digital approaches to holding qualitative data had advantages that could be important for us, particularly facilitating team-working. Our protocol sought to:

1) minimise paper versions of interview data (transcriptions) and fieldwork notes in favour of holding these digitally from the start or as soon as possible;
2) minimise the time period during which data was held outside of our university offices (with fieldworkers, with transcribers);
3) anonymise data as early as possible in the period of holding the data;
4) destroy non-anonymised versions of data (i.e. voice recordings of interviews) as soon transcription had occurred, and again, as early as possible in the process;
5) back-up all digitally held data onto a transportable medium (CDs or mini-disks) to be stored in a locked filing cabinet; and
6) use passwords on all word-processed documents (e.g. interview transcripts, fieldwork notes) and to protect all data held on desktops and laptops through ‘Windows’ passwords.

We felt that these procedures together were fairly rigorous, and that whilst they did not guarantee the security of our data, they went a considerable way towards it.

Only a few months into our fieldwork, an unexpected event put our procedures to the test. A laptop containing a handful of both digital voice files of recorded interviews – and their transcriptions – was stolen from the home of a fieldworker after a break-in. Our first response was to report the theft to the police and alert the University of Manchester Ethics Committee (to whom we were obliged to report unexpected events affecting ethical aspects of our research). We then set about informing each of the people with whom we had conducted the stolen interviews of the loss. We were fortunate that not one of these interviews (all had occurred early in our research) involved interviewees discussing other people, or highly sensitive events such as those we succeeded in getting data about in later stages of our research. We were also fortunate that our interviewees were all unfazed by the loss, convinced that the laptop’s contents were very likely to be wiped, before being sold on. Finally, we set about re-thinking our security procedures. One part of our re-think involved consulting a clinical colleague, who had developed some expertise on data security in relation to data he held about his patients, along with IT people in our own university with expertise on data security.

We had mistakenly believed when starting our research that holding our data digitally automatically afforded relatively easy and straightforward security procedures (e.g. the use of passwords), and would therefore almost inevitably be ‘better’ than paper-based data in this regard. We have discovered, however, that digitally-held data are just as vulnerable as paper-based data, and in some ways are more vulnerable. For example, digitally held data facilitates sharing data quickly within a research team (such as between fieldworkers and managers); this is an undeniably useful feature of the digital approach to team working. However, this in itself multiplies opportunities for insecurity. Procedures developed for a time when the qualitative research process was primarily paper-based (e.g. the ‘locked filing cabinet’), on their own, provide insufficient security for qualitative data in a digital age. Indeed, paper versions of ‘raw’ data increasingly may never appear, as all operations carried out by qualitative researchers – from collecting and transcribing data, to reading and analysing it – can be now be carried out, and increasingly are carried out, on-screen only, and without ever having to print data onto paper. It is therefore important to recognise that digitally held data does not automatically provide for ‘better’ security: both digital and paper-based approaches to holding and processing qualitative research data bring with them their own security problems that need to be incorporated into security procedures.

**Issues to consider**

Before presenting our guidelines, we outline a series of issues that need to be understood in relation to carrying out qualitative research using digital data. Digitally held data allow multiple copies of data shared across people, locations and devices (e.g. to back-up data, to share data). As copies and versions of data proliferate, insecurity opportunities increase.

1. **Digitally held data is stored in numerous locations during research.** These places include: in ‘the field’; in the home of fieldworkers, interviewers, transcribers, and research managers, in the university offices of people with various roles, and ‘in transit’ between all these locations. **Security procedures**
developed for digital data must take into account the potentially numerous geographical locations in which digital data are held over the course of research.

2. **Digitally held data is stored in numerous forms.** Digital versions of qualitative data are held in a number of forms: digitally recorded voice files (of interviews or fieldwork notes) held in MP3 format or similar; transcriptions of voice files held in word-processed documents; versions of work-processed text files held in CAQDAS (such as NVivo and Atlas.ti). Security procedures developed for digital data must take into account that digital versions of data are held in a number of forms including voice files, text files for holding transcripts and notes, and text files for use in data analysis software (CAQDAS).

3. **Digitally held data is used by numerous individuals with a variety of roles on a research team.** The many forms of digital data, held in many places, are also used by a number of individuals with different roles on a research team, and can be transferred back and forth between them, for example, in preparation for, and subsequent to, team meetings in which collected data are reviewed. The relevant individuals include: interviewers, fieldworkers, transcribers, research managers, and those responsible for data analysis. Security procedures developed for digital data must take into account that digital data is likely to be passed back and forth during the data collection and analysis phases of research between members of a research team with different roles.

4. **Digitally held data are stored on a number of different devices during data collection and analysis.** The devices on which digital data are held during fieldwork can include: the recording device on which voice recordings of fieldwork notes or interviews take place (increasingly, these are MP3-type recorders with in-built memory or hard-drives, and often are recorders with removable storage such as mini-disks); university office and home-based desk-top computers; laptop computers; and portable digital storage devices like memory sticks (aka USB drives, pen drives) and CDs. Security procedures developed for digital data must take into account that digital data is usually stored a number of different digital devices.

5. **Digital data are held over a range of times coinciding with the various phases of qualitative research.** These times or phases of the research process during which digital data are first collected and then manipulated and held include: initial data collection, adding to collected data, storing collected data, analysing data, and then finally, more long term archiving of collected data. Security procedures developed for digital data must take into account the different phases of research and the length of time that data are required to be held.

**Guidelines**

Our revised protocol patches up some of the holes in our original data security procedures, and further takes into account developments in dealing with data that we made during the course of our research. The issues identified above (where data are held, in what forms, by whom, on which devices, and over what period) have all been considered in these guidelines.
1. **Passwords to protect access to files, computers and devices are useful, and should be employed.** However the protection offered by many password features is flimsy, and can be relatively easily by-passed. Our initial use of passwords was limited to files on which these were already available as features (we used Microsoft Word for text files, and employed the password protection facilities available within Windows). We also used individual passwords to protect access to our desktop and laptop computers. As there was no obvious way to password-protect our voice files, at least prior to revising our protocol, we did not. After consulting our security experts, we learned that the kinds of passwords we were using were easy to break, and that the software on which we relied did not incorporate security features that were adequate to our needs.

*Our recommendation: use ‘good’ passwords that: combine letters and numbers, combine uppercase and lowercase characters, and are sufficiently long. Use different passwords for different purposes. Do not allow your computer to ‘remember’ a password for you; instead, enter this each time from memory. Note that some kinds of passwords can be fairly easy to break for a determined hacker.*

2. **Use encryption software to provide secure places to hold data on desktop and laptop computers, and on portable storage media such as memory sticks.** Our discovery that the passwords, and the features of the software programmes employing them, that we used to ‘secure’ our data were actually relatively insecure (see Guideline 1) led us to begin using encryption software to increase the security of all the places we were storing data (including hard drives on our laptop and desktop computers, and on the memory sticks we used to both transfer and back-up these data). A number of different approaches to encryption of text-based data are available, and different products on the market reflect these approaches. After the advice of experts and some initial research, we chose ‘Steganos’. This product allowed us to identify a portion of a hard drive that we wanted to secure; everything stored within it is referred to as an ‘encrypted disk’. When opened, work on files in the encrypted disk area carries on as usual. When closed, the encrypted portion of the disk itself is not visible. Access to the encrypted disk is controlled via a password, and Steganos assists users in creating highly secure passwords. Encryption is not permanent: when the encrypted disk is opened, files can be removed from it and placed elsewhere, thus removing the encryption. The use of encryption software was, for us, the single biggest improvement to our security procedures. All members of our research team used an ‘encrypted disk’ to store all files related to the project on each of the computers they used in their work (that is, all desktop and laptop computers). We found it easy to use the encrypted disk to store all the different kinds of files we used, including voice files, text files, and analysis files. Our use of encryption software meant that, in the event of loss or theft, such as happened to us early in our research, it would be very unlikely for a thief even to know that an encrypted disk was present; and if they did know this, they would be extremely unlikely to be able to access these files contained in it. *Note:* Like any other approach to security, however, encryption is not a magical solution, and must be employed in conjunction with a range of other security solutions. It is important to learn to use the software properly, for example by removing temporary files.
Our recommendation: use encryption software to create digital space on computers and storage media for holding all qualitative data and related work.

3. **Ensure that all members of a research team use the same security procedures.** This includes transcribers, and others not always considered to be core team members. Transcription is sometimes done by contracting the work out to external companies, and it is important not to assume that the security procedures they have in place are sufficient. Ask them to demonstrate their security procedures. If the procedures they have in place do not appear to be as robust as yours, ask them if they would be willing to adopt your procedures for the work they do for you.

Our recommendation: insist that all people who will be dealing with your qualitative data, including those not directly employed by your institution, use security procedures at least as good as the ones you employ.

4. **Consider storing data online using an anonymous password protected webpage.** At a fairly early stage in the research, we developed, along with a member of our IT staff, a way for our team members (initially three fieldworkers and two principal investigators) to share progress, ideas and data in a way that was both relatively secure and that reduced the need for creating multiple copies of our data for back-up. We created a set of linked password protected webpages (which referred as our ‘Research Journal’). The Journal consisted of online space for us to: place relevant field contacts, timetable weekly field activities, contribute relevant links and documents from the literature and describing important local events, and most important to this discussion, store data files (including voice files, and text files of fieldwork notes and interviews). The Journal pages were constructed so that no links to it existed anywhere in the university (or elsewhere), and web pages were stripped searchable ‘tags’ of HTML code of so that they could not be accessed through web-searching. This Journal initially provided us with a useful forum to exchange data and other kinds of information with one other quickly and easily. The primary advantage in terms of data security was that, once files were placed on the Journal (password protected where possible), originals could immediately be deleted from the devices of fieldworkers (that is, their fieldwork laptops and voice recorders). The data linked to the webpages was backed up daily by the university in its normal procedures. This therefore eliminated the need for having back-ups available in multiple locations. Both of these features of the online approach to data storage thus reduced the problem of insecurity through the proliferation of files. The Journal itself was password protected. Note: We only used our Journal to hold research data in the early phases of our research, and abandoned it after moving to the use of encryption for work we later carried out on local computers. In spite of being assured by IT staff in our university that the Journal was a secure place for data storage, we nevertheless remained nervous about this approach, worrying that a determined hacker could find the way to our data. In future team-working qualitative research projects, we might again consider the on-line approach to data storage after exploring methods for encrypting data on the server and remote access through a Virtual Private Network (VPN).
Our recommendation: the creation of a suitably secure online location for the storage of data files, that cannot be accessed through web searching, may reduce or eliminate the need for security-problematic multiple copies of data to facilitate data sharing in research teams and back-ups. However, the use of shared networks/servers carry with them a different set of security risks to those posed by storage on local computers and portable media, and in future, we would explore additional security possibilities including encryption and remote access through VPNs.

5. Make back-ups of work carried out on encrypted computer disks to portable encrypted media (e.g., memory stick), and store this separately to the computer where original work is carried out. Because both in-built and portable disks (e.g., memory sticks) can be encrypted using software such as Steganos, use of this product simultaneously helped us to secure our back-ups. During the analysis phase of our research, all data were held on an encrypted portion of the computers being used by each of the four of us involved in data analysis using Atlas.ti. Our individual coding progress was saved not only on this encrypted disk, but also backed up daily to the encrypted portion of a memory stick (pen drive, USB drive). For those working on laptops and carrying these back and forth between home and university offices, the laptop and memory stick were always carried separately, in case of loss or theft.

Our recommendation: minimise multiple copies of data as back-up where possible through the use of online data storage (see Recommendation 4). Where this is not possible, ensure that backed-up data is stored on an encrypted disk.

6. Paper fieldwork notes should be destroyed as soon as possible after digital encryption. Recording notes in the field can be done in a variety of ways, to suit both individual preference (e.g., digital voice recordings of observations versus hand-written notes on paper), and the demands of the research project itself. Some settings, for example, may be suitable for taking laptop/notebook style computers to type notes that immediately result in text files. In other settings, the use of visible electronic equipment may be inappropriate or even risky. Security procedures will vary depending on the approach to note-taking, but some principles for good practice apply. Handwritten notes should be translated into encrypted digital notes text files as soon as possible and destroyed with a cross-cutting paper shredder. Where recording ‘dictaphone-style’ digital voice files, use password protection on the device if available, translate into encrypted digital text files as soon as possible, and then delete from the recording device. Use of a laptop computer to record fieldwork notes in a way that is immediately encrypted has the advantage that initial parallel versions of the notes are not constructed to later be destroyed. This disadvantage is that, during use when the encrypted disk is open, its contents can be viewed by others.

Our recommendation: Employ the style of field note taking that is most suitable to the research and that suits personal preferences; however, delete or destroy notes held temporarily in any medium that is not encrypted (paper notes, voice recording) in preference for more permanent storage on the encrypted disk of a computer that is not based ‘in the field’.

7. Minimise paper printouts of data. In general, paper printouts of data should
be minimised. All phases of the research process can (in principle) be carried out without recourse to paper, with work (transcribing, reading, coding, analysis) being viewed on-screen. However, even researchers adopting primarily digital methods sometimes prefer not to carry out some tasks on screen, such as reading transcripts, or comparing documents. Other tasks, similarly, may be inherently more suitable to paper and pen approaches, such as field note taking in particular research environments where visible equipment may inappropriate. Wherever data are printed onto paper, documents should be kept in locked cabinets when not in use and shredded using a cross-cutting paper shredder immediately after use.

*Our recommendation: in general, employ on-screen methods for reading and analysing data. Where you do print out paper versions of data (such as in meetings), shred using a cross-cutting shredder as soon as possible; store paper in a locked filing cabinet as a last resort.*

8. **Simply deleting files from a computer’s hard disk does not remove them permanently.** An additional advantage of using the Steganos product we used for encryption (‘Steganos Security Suite’) is that it contained other useful security features. We used this programme to permanently delete files so that they cannot be recovered, and to permanently ‘clean’ the spaces on the disk where files have been deleted from. This is important, since computers can often be sold on or recycled within research institutions.

*Our recommendation: employ methods to ensure that data files you want to delete are permanently and completely deleted, so that they cannot be recovered. Steganos Security Suite, amongst other products, provides this.*

9. **Anonymise interviews and fieldwork notes as early as possible into the data collection process.** It is considered good practice to anonymise interview transcripts as early as possible into the data collection process to improve data security. This was problematic in our research for a few reasons. First, many of the individuals we interviewed would be recognisable to some others reading even anonymised transcripts because of the – usually well known – events they discussed. Second, although it is simple enough to assign pseudonyms to interviewees, it was not straightforward to do so with the many scores of references made during an interview to other named individuals, a difficulty further complicated by the fact that named individuals often had one or more ‘street’ names or aliases by which they were known. It was only as our research progressed that we began to match names with aliases; but this process could only ever be partial. For this reason, working out ‘who was who’ could never been done in a final way – essential when replacing names with unique pseudonyms. The only procedure which is consistent is the - admittedly minimalist - approach of replacing all individual names with ‘person name’. Doing so, however, reduces the analytic utility of the interviews. In the end, we were not only unable to complete anonymisation at the early juncture we had planned, but unable to do it in a sufficiently satisfactory way to retain data integrity. Although this was less than ideal from a security point of view, we made use of our updated security procedures to store non-anonymised transcripts for longer than originally anticipated.
Our recommendation: Early anonymisation of interview transcripts is good practice; if anonymised transcripts are lost or stolen, problems in relation to confidentiality are minimised. In our research, anonymising the names of individuals and places often resulted in individuals and events still being recognisable, and was in any case practically difficult because of the widespread reference by interviewees to named individuals and well known events. To compensate, we extended our use encrypting these data files over a longer period than originally anticipated.

10. If interview data pose confidentiality problems that prevent them being publically archived, consider alternative ways in which access to the data by other researchers can be negotiated in order to facilitate secondary analysis and comparative research. As described in Recommendation 9 above, our data were particularly difficult to anonymise for our own security purposes. The process of anonymisation that we attempted for the purpose of public archive was even more extensive, and rendered the data ‘left’ after anonymisation considerably impoverished, and in some instances actually misleading. In addition to removing specific person and place names, we also had to black-out sections of text that referred to recognisable events and people, even where specific names were not mentioned. We found that ‘what was left’ amounted mostly to non-specific generalities, and that this kind of talk often contradicted more detailed reporting about specific events elsewhere in the transcript. However, there are precedents for sharing data whereby specific use agreements can be individually negotiated. We believe it is important to allow access by other researchers to our data in order to facilitate both secondary analysis and comparative research. For these reasons, we will explore the possibility of negotiating agreements with individual researchers and research teams for them to use our research only under our the specific circumstances set out in the agreement. Such agreements would need to be negotiated with institutional ethics committees where the research was carried out, and specify conditions, such as (for example) that data are re-analysed on site.

Our recommendation: if the type of data produced within the research prevents it from being publically archived, consider putting in place the possibility for individually negotiated agreements allowing other researchers access to the data.

11. Former employees may retain possession or access to data. Take steps to reduce this. Not all those who work on a research project do so from start to finish as principal investigators usually do, because their contributions may be limited by the nature of their work (transcription for example) or as a result of their employment contract. It may be useful to put in place agreements limiting ongoing access to data with all those working on a project. The agreement should require these individuals to return data and media on which they are stored when they no longer require access to that data (either because they no longer require access to carry out their tasks, or because they are no longer employed on the project). Agreements like these might also specify specific ‘good practice’ behaviour such as ‘deep cleaning’ hard disks where data have been stored but deleted. It is important to then ensure that these activities occur when contact with the employee is still in place. Another useful strategy is to change passwords that grant access to data that are held communally once the need for that access is finished.
Our recommendation: Put agreements in place with those employed to work with data to ensure that data are returned before the end of their employment, and that ongoing access to data is removed.