

# Prostitution and sex work, who counts? Mapping local data to inform policy and service provision

Dr. Alba Lanau, Centre d'Estudis Demogràfics (CED-CERCA), UAB, Bellaterra  
[alanau@ced.uab.es](mailto:alanau@ced.uab.es) (corresponding author)

Dr. Andrea Matolcsi, School for Policy Studies, University of Bristol  
[andrea.matolcsi@bristol.ac.uk](mailto:andrea.matolcsi@bristol.ac.uk)

**This is the post-peer review pre-editing version of an article published at Social Policy and Society. Please cite: Lanau, A., & Matolcsi, A. (2022). Prostitution and Sex Work, Who Counts? Mapping Local Data to Inform Policy and Service Provision. *Social Policy and Society*, 1-15. doi:10.1017/S1474746422000136**

## Abstract

*Data on the sex industry is notably hard to obtain. Existing evidence points towards an increase in the number of people selling sex, particularly through the online industry. The growing and increasingly diverse population poses challenges to service provision, as new groups are less visible and less likely to be in contact with specialist services. Simultaneously, there are increased calls for policies regulating the sex industry to be grounded in evidence. Relying on systematic literature and data reviews, this article provides a synthesis of the evidence on the prevalence of sex work and prostitution in England and Wales. It shows that no existing source allows producing reliable estimates of the size and characteristics of sex markets. As a result, policy is informed by partial pictures. The article proposes local mapping, an underused approach, to inform both policy development and service provision.*

## Introduction

Estimating the number of individuals selling sexual services is key to developing policies and services, identifying priorities, making informed funding decisions and assessing the impact of policies and services, among others. However, reliable estimates of the size of the sex

industry and the characteristics of those working in it are difficult to obtain. This difficulty comes, on the one hand, from actual difficulties associated with the nature of the population (e.g. high mobility, a desire for privacy and anonymity, stigma) and on the other from what Wagenaar and Altink (2012) call 'morality politics'. Prostitution policy, they argue, is generally governed by ideology, emotionally charged and resistant to facts.

Yet, the existence of ample literature on the nature and prevalence of sex work and prostitution suggests that data does influence academic and policy debates. In the United Kingdom (UK), researchers have used a range of approaches to produce population estimates for those selling sex in various settings within the sex industry (e.g. Kinnell, 1999; Hartworth et al., 2012; Abramsky and Drew, 2014; Brooks-Gordon et al., 2015; Sagar et al., 2015; Sanders et al., 2018; Hester et al., 2019). Ultimately, multiple estimates size of the sex industry co-exist, alongside varying estimations of the relative weight of different groups (e.g. migrant versus non-migrant workers, victims of exploitation vs independent workers) as well as multiple interpretations of such categorisations (Hester et al., 2019). This is problematic as the effective design of policies and interventions relies on commanding reliable and comprehensive information on the reality on the ground (Shaw et al., 1996, Walby et al., 2016). Data limitations can also reinforce reliance on ideological positions (Wagenaar et al., 2017); in the absence of reliable evidence any side can claim to represent the majority view.

People working in the sex industry face enhanced risks including physical or sexual violence (Church et al., 2001; Shannon et al., 2009; Cunningham et al., 2018), psychological harm and mental health risks (Hester et al., 2019), stigma and isolation (Benoit et al., 2018; Sanders, 2013), and vulnerability to exploitation (Hester et al., 2019; Wagenaar and Altink, 2012). Many also experience financial, housing and/or drug and alcohol misuse issues (Sagar et al., 2014; Hester et al., 2019). As such, people selling various types of sexual services in various settings may require a range of different types of support.

In the absence of a well-developed national policy framework, prostitution policy in England and Wales has been increasingly decentralised, leaving policy and service provision to local areas, which in turn apply diverse approaches (Sagar and Croxall, 2012; Niemi and Aaltonen, 2014). This is not unique to England and Wales: In the Netherlands and Austria, for example, Wagenaar et al., (2017) remark how implementation by local actors, chiefly the police and local administrations, have meant that local policy often deviates considerably from national goals. At the same time, local services as well as regulations and approaches (e.g. as related to policing) do not exist in a vacuum and will only go so far in the context of national policies and laws (Brown and Sanders, 2017; Sagar and Croxall, 2012). Indeed, the needs, risks and experiences faced by people selling sex are shaped by the wider legal, economic and policy context. The local and the national interact in complex ways that shape the reality of commercial sex on the ground (Wagenaar et al., 2017) an issue to which we return below.

While the medium- and long-term impact on the sex industry of the COVID-19 pandemic is not yet known, there is some evidence that up until that point, the number of people involved in the sex industry had been growing. The English Collective of Prostitutes (ECP, 2018), amongst others, has linked national austerity policies, and more widely poverty, to an increase in prostitution. The connection between benefit reforms (specifically the introduction of Universal Credit) and what has been termed ‘survival sex’ has since been recognised by the government’s Department for Work and Pensions (Work and Pensions Committee, 2019, see also Alston, 2018). The growth of the sex industry has also been facilitated by new possibilities afforded by the internet: 65% of respondents to a survey of individuals advertising sexual services online reported that they would not be selling sexual services if it were not for the internet (Sanders et al., 2018). The figure suggests an increase in the number of people in the industry as well as the existence of new profiles of individuals selling sexual services. Recent research (Matolcsi et al., 2021) also identifies new and growing types of sex work.

This article assesses the current state of knowledge with regards to the prevalence of prostitution and sex work in England and Wales and concludes that no source of data allows to accurately assess the size and characteristics of the sex industry. As result, prostitution policy is designed without information on the nature, size and composition of target groups, or the impact of policy on the ground (Wagenaar et al., 2017). Governments rarely collect systematic data on prostitution and sex work (Wagenaar et al., 2017). Indeed, data on the sex industry is notably difficult to obtain (Shaw and Butler, 1998; WHO, 2010; Kingston and Smith, 2020). Fear of stigma, negative experiences and in some cases coercion and control mean that sex work and prostitution are often hidden (Dodsworth, 2011; Walby et al., 2016). The sex industry is diverse, dynamic and mobile, with people moving in and out of the industry, across sectors and geographically (Whowell and Gaffney, 2009; Pitcher, 2015; Hester et al., 2019). Even where sex work is legal, the industry tends to operate in the shadows and individuals selling sex tend to mistrust and resist policy measures (Wagenaar et al., 2017). While these challenges are significant, data is essential if services are to respond to existing, emerging and changing needs. Given this, we argue for the use of aggregated local and/or regional level data to inform both service planning and wider policy development. In-depth local evidence has the potential to build a more accurate and comprehensive picture of the sex industry, that acknowledges its geographical variations. Furthermore, local mapping can directly inform service delivery through the identification of existing needs and gaps (NSWP 2015; Sagar et al., 2014).

This article is structured as follows: Section 2 defines the realms of prostitution and sex work as well as their commonalities and differences, as understood and employed by this study. Section 3 provides information on the methods employed in this research. Section 4 describes the key findings with regards to the prevalence of sex work in England and Wales, the challenges associated with the rise in online markets and more generally with data collection. Section 5 introduces local mapping as a powerful yet underused tool for estimating the size

and characteristics of the sex industry and discusses both its potential and limitations. To conclude we propose that if done in collaboration with local actors, local mapping can reduce uncertainty and provide key data to inform service planning and delivery, and can potentially reduce the reliance on moral judgement for policy planning.

## Prostitution and sex work

Who counts and who is counted as part of the sex industry is to a large extent a political decision, and can also be influenced by the knowledge of those counting of what possible categories there are to count. Individuals selling sex in the UK are diverse in terms of demographics and motivation and report a range of experiences. There is ample evidence of vulnerability, limited choice, exploitation and other harm (see e.g. Coy, 2008; Harding and Hamilton, 2009; Jeal and Salisbury, 2007), alongside research suggesting more agency and nuance in relation to harm (Sanders et al., 2009, 2018; Pitcher, 2019) and individuals and organisations demanding to be recognised as workers and for sex work to be decriminalised (ECP, 2015; NUM, 2018). These groups have different needs, demands and power. Such diversity is a challenge when designing policy and planning services, more so, since -as will be shown- we know little about the relative composition of the current sex industry.

We define prostitution and sex work as the provision of sexual or erotic acts or sexual intimacy for payment in money or other benefit or need (Hester et al., 2019). While the terms 'prostitution' and 'sex work' are sometimes used interchangeably, they reflect different scopes and understandings of the sex industry. The terms 'sex work' and 'sex worker' emerged to redefine the selling of sexual services as work, and to thus promote the agency of and reduce stigma against those selling sexual services (Overall, 1992). Meanwhile, the terms 'prostitution' and 'person in prostitution' tend to be used to highlight what is seen as a lack of power and agency in selling sex, and to reject the notion of selling sex as labour. Furthermore, while 'prostitution' is a specific activity involving direct physical contact

between the seller and buyer, 'sex work', although sometimes used to refer solely to direct sex, it often also includes other areas of the sex industry, with or without direct physical contact (e.g. lap dance, BDSM, webcamming). Regardless of the term used, employing a wide definition as above is valuable in planning policy and services so as not to exclude groups.

Furthermore, our definition captures a wider group than a definition limited to 'selling sexual services in exchange for money'. For example, some individuals exchanging sexual acts for money or other benefit or need may not see themselves as selling sex, such as those involved in sugar arrangements or those who sell sex 'incidentally' without planning to do so (Morris, 2018). These individuals may still experience some of the support needs and risks associated with selling sex (for an overview of risks see Kinnell, 2008; Sanders, 2013; Cunningham et al., 2018). Moreover, (Hester et al., 2019) identified a range of engagement patterns including full time as well as occasional or intermittent engagement, with sex work and prostitution often taking place in combination with other activities such as caring, studying, volunteering and paid employment. This can also cause individuals to not identify with labels or identities as a 'sex worker' or 'person in prostitution'. A wide view thus also allows to better capture the diversity of pathways into, out of and within the sex industry (see also Coy, 2008; Harding and Hamilton, 2009; Dodsworth, 2012; Sagar et al., 2015). Here we use both terms, prostitution and sex work, as well as 'selling sex', to refer to this wide range of experiences and practices. We acknowledge the ideological leanings and limitations of both terms and the existence of other terms, for example 'transactional sex' and 'survival sex' (see McMillan et al., 2018; also Mulvihill, 2019), and that specific terms are experienced as harmful by some individuals. However, we use this range of terms here because they are the most widely-known, encompass the broader sex industry and not only direct paid sex, and go some way to reflect the diversity in experiences and views on the sex industry. Recognising the range of experiences within the sex industry is, in our view, one of the starting points for a successful mapping exercise.

## Methods

To assess the current state of knowledge with regards to the prevalence of prostitution and sex work in England and Wales, we proceeded in two steps: a systematic literature review and an extensive data review. The literature review aimed at identifying the current state of knowledge on the sex industry in England and Wales, unifying research published across disciplines. Between April and May 2018, the team searched Scopus, Social Services Abstracts, Web of Science, ProQuest, IBSS, OvidSP for literature published between 2000 and 2018, in English and mentioning 'prostitut-' or 'sex work' or 'commercial sexual exploitation'. Since a substantial part of research produced by NGOs and government bodies is not published in academic outlets, the database searches were complemented by hand-searches, recommendations and citation tracking. In total, we identified 10,724 publications. A team of four researchers manually searched and coded titles and abstracts. A small proportion (236) mentioned prevalence. We narrowed the search to items referring to the United Kingdom and England and/or Wales, and prevalence including existing estimates and methodological texts. This yielded fifty-one texts which were read in full. We excluded studies that focus on specific types and settings within the sex industry. Only five publications reported primary data for the wider sex industry alongside a transparent methodology; these are discussed below. Kinnell (1999) was included despite being outside the initial time range as it has strongly influenced later studies. An updated search conducted in July 2020 for this article uncovered 55 further articles published between 2018 and 2020, but none fit the inclusion criteria.

In addition to the above literature searches and review, we concurrently carried out a data review informed by five sets of sources: 1) data sources used in previous research; 2) a systematic search of the UK Data Service database for studies and series from 2000 (keywords: sex, prostit\*) 3) a search of the UK Data question bank for surveys containing the

words prostit- or sex) 4) interviews with key stakeholders and 5) online questionnaires distributed to selected stakeholders (5 police forces, 11 service providers/NGOs, 4 local authorities) on existing data collection procedures. The interviews and questionnaires allowed us to assess the potential for new (including small-scale) prevalence estimates at the local or regional level. More detail is provided below.

## Counting in the sex industry

Historically, the primary source of information on the nature and prevalence of sex work and prostitution in the UK has been data from support services and frontline professionals who regularly work with and support people in the industry (e.g. Kinnell, 1999; Brooks-Gordon et al., 2015). While service providers hold valuable knowledge about the experiences of their clients, local circumstances and so forth, there are limitations to these estimates rooted in the numerous difficulties in identifying and accessing individuals who may need support. Those selling sex on-street/outdoors can be transient, or have difficulty making or sustaining contact with services due to issues around drug and alcohol addiction and homelessness. Meanwhile, the expansion of the internet has promoted a shift away from more visible street/outdoor prostitution towards the advertising, organising and exchange of sexual services indoors and online. Individuals in these sectors are less likely to be in contact with specialist services (Pitcher, 2015; Sanders et al., 2018), and there are concerns that they are often excluded from policy development and service provision (Hubbart and Prior, 2012).

Furthermore, some of those who do contact non-specialist support services (e.g. sexual health clinics) may not be willing to disclose their participation in the industry. Respondents to an online survey by Hester et al. (2019) described hiding their occupation from both services and their social circles and having a fear of being outed as a sex worker. Some participants who were mothers were concerned about social services questioning their ability to parent. Similarly, street workers interviewed by O'Neill et al. (2017) reported feeling uncomfortable



and judged when interacting with sexual health services, which led many to avoid disclosing that they were selling sex (see also Dodsworth, 2012). Negative experiences with police, involvement in illegal activities (or those perceived as illegal) and immigration status also discourage individuals from contacting services or disclosing that they sell sex (Voices Heard Group, 2008; Changing Lives, 2016). As a result, the information held by support services and frontline professionals is unlikely to provide an accurate representation of the industry.

New research has focused on independent workers in the online sector, i.e. where sexual services are advertised, organised, and/or exchanged online (e.g. Sanders et al., 2018; Pitcher, 2019). Attention to individuals working independently online sheds light on an until recently under-researched area of the industry. At the same time, a focus on the online market may result in those working on-street/outdoors and/or not working independently being excluded, thus perpetuating the issue faced by previous studies with a focus on street and indoor markets (Hester et al., 2019). As detailed later, local mapping, while employing a wide definition as above, can help to move towards more comprehensive prevalence estimates which reflect the broader sex industry. The next sub-sections present a systematic review of the evidence on the prevalence of sex work and prostitution in England and Wales and the growing body of evidence on online sex markets.

### *Evidence on the prevalence of sex work and prostitution*

Arguably, the most widely cited estimate for the prevalence of sex work in the UK is Kinnell's (1999) 80,000 figure. To estimate the number of women selling sex Kinnell (1999) surveyed 16 service providers (out of 120 thought to operate at the time) on the number of individual service users as well as an estimate of the number of sex workers in their area. The ratio between the area estimate and known service users is used as a multiplier to estimate the number of individuals selling sex. She estimated 80,000 women to work in the industry in the late 90s. More recently, Cusick et al. (2009), Pitcher (2015) and Brooks-Gordon et al. (2015) built on Kinnell's approach to create updated estimates. Deriving multipliers from the average

number of service users is common practice when studying hard-to-reach populations, however, the accuracy of the produced estimates is difficult to assess (WHO, 2010). For instance, individuals in contact with multiple services may be double counted. To mitigate this issue, Cusick et al. (2009) relied on recorded data on the number of unique (self-identified) sex workers that used the service in a year, while Pitcher (2015) asked services to estimate the proportion of their users who are in contact with other services. Multipliers are also affected by the characteristics of the responding organisations. For instance, larger better resourced organisations may be more likely to reply, resulting larger multiplier, and thus an overestimate of the population size. Furthermore, services tend to specialise in specific groups (e.g. street workers, victims of trafficking) and may know little about other areas of the sex industry. Overall, multipliers risk introducing unknown biases in the estimates.

Furthermore, the profiles of those accessing services partially reflect the existence of appropriate and accessible services (Hartworth et al., 2012). Visibility of and support for specific groups also varies by area. For instance, there are no male specialist services listed in the UKNSWP directory for Wales, two in London and three in Yorkshire. Equally, a reduction in the number of services (e.g. as a result of austerity), would result in reduced population estimates regardless of actual changes in the population. For instance, if participation in the sex industry is increasing following a recession and/or benefit cuts, while simultaneously services are being reduced, estimates from service providers are likely to result in an under-estimation and misrepresentation of the sex industry.

Some studies have sought to overcome data limitations by combining information from multiple sources. Abramsky and Drew (2014) sought to estimate the size of the indoor and street prostitution markets in the UK by combining data gathered on the indoor market (Dickson, 2004) with London Metropolitan Police data on street prostitution. Their study has been heavily criticized chiefly for their reliance on London data to build national

estimates, and the use of police data<sup>1</sup> (see Brooks-Gordon, et al., 2015 for a detailed discussion).

Brooks-Gordon et al. (2015) complemented data from services with existing research on under-represented populations such as men, and checked their estimates with people directly involved in the sex industry. The assumption is that people in the industry often know each other and can estimate how many people operate in their geographical area. While the contrast of multiple sources of data allows a degree of triangulation which can help evaluate the observed estimates, such an assumption can be problematic, particularly when respondents are asked to provide estimates for people in other areas of the industry (WHO, 2010).

So how many people are in the sex industry in the UK? With the different methods and scopes noted above, it is unsurprising that the estimates vary substantially. Brooks-Gordon et al.'s (2015) estimate for 2009-13 is 72,816 individuals, very close to the numbers obtained by Kinnell (1999), and Pitcher (2015) who estimated 85,714 people selling sex in the UK. Cusick et al. (2009) report a 'conservative estimate' of 35,882 but note that the actual figure may be up to three times as high, i.e. over 100,000 (Cusick et al., 2009: 714). Abramsky and Drew (2014) estimated around 58,000 women to be selling sex in 2004. The lack of consensus in the estimates reflect differences in methodology and population of interest (e.g. different settings/types, genders) and are also a testament to the difficulty of producing reliable national estimates. The expansion of the internet has changed the sex industry and added new challenges.

### *Online sex markets, new sources and new challenges*

The expansion of the internet has substantially altered the sex industry and added complexity to prevalence estimation. A range of actors including independent sex workers, traffickers, brothels and others advertise sexual services online. Advertising takes place through both

sex industry-specific platforms and classifieds sites. Online advertising platforms are an obvious but also problematic source of prevalence data (Sanders et al., 2018; Hester et al., 2019). Counting profiles on online advertising platforms can provide a quick and rough estimate of the size of the online market.

However, it is also likely to lead to an over-estimation of the number of people selling sex. Some individuals will have multiple profiles, either on the same or different platforms, while profiles that are no longer active may still appear in platforms (Sanders et al., 2018; Hester et al., 2019). In their analysis of online platforms, Sanders et al. (2018) found up to 32 percent of profiles to be inactive, while Hester et al., (2019) report that around half of the profiles on two of the most-used sites are incomplete. An additional risk lies in analysing only the most widely used platforms, which would lead to an under-representation of groups more likely to use specialist platforms such as ethnic minorities or men selling sex to men. Finally, the information published by websites relies on self-reported data. However, descriptions of personal characteristics such as age, nationality or sexual orientation do not necessarily reflect those in the industry, as advertisers tend to modify profiles to include characteristics that are perceived as more desirable (Hester et al., 2019). All in all, while using online data sources is essential to understanding the sex industry today, relying on online sources alone risks miss-estimation, overlooking practices that are part of the sex industry, and obtaining an inaccurate picture of the characteristics of individuals selling sexual services.

All of the approaches discussed above highlight and provide valuable information on some sectors of the industry, but leave other areas and groups obscured. Studies relying on data from service providers will likely under-estimate victims of trafficking and exploitation, migrants as well as escorts and those linked to the online industry, who are less likely to be in contact with specialist support services. Research relying on online sources will likely under-estimate groups such as sexual and ethnic minorities, who tend to use specialist

channels and sites, as well as groups who are less likely to access (whether because of resources, safety or other reasons) the internet to participate in online research.

Awareness of the trade-offs associated with each methodological approach is key for the development of social policy responses as it will affect conclusions about the relative weight of different groups. Gender breakdowns, for example, vary widely. Using data from specialist services, Pitcher (2015) estimates men to be 7 percent of the industry, while an analysis of the main online platform reports 42 percent of advertisers to be men (Import.io, 2014). Reliance on incomplete data therefore can muddle not only the overall size but also the characteristics of the industry. This is critical when defining priorities for planning or estimating unmet needs for services. Next, we examine other sources of data available for estimating the prevalence of prostitution and sex work in England and Wales.

## Mapping local data

Our data review identified no national datasets that allow for estimating the prevalence of prostitution and sex work in the UK, England or Wales. The National Survey of Sexual Attitudes and Lifestyles currently only collects information on whether respondents have paid for sex. The proportion of men who report having paid for sex has increased over time, from 2percent in 1990 to 4percent in 2000, and 11 percent in the latest survey (Ward et al., 2005; Jones et al., 2015), however, the trend may reflect increased likelihood to report rather than increase in demand, supply or number of exchanges. Thus, currently in the UK, no source of data allows for assessing changes in the prevalence of sex work and prostitution.

Research using a range of sources has evidenced geographical variations in the size and nature of the industry (Hartworth et al., 2012; Changing Lives, 2016; Brooks-Gordon et al., 2015), which imply different needs and priorities. Sex markets vary across locations in terms of the size of the street scene, modalities of sex work and prostitution, nationality and gender of those involved in the trade, amongst other characteristics. Some areas in Northern England

have a small or non-existent street scene, while in larger cities, street areas tend to be larger and clearly defined (Hester et al., 2019). In some regions, escorts are mainly organised by agencies, while in others independent escort online adverts are more common. The London scene is largely international and multi-ethnic (Brooks-Gordon et al., 2015), while a study in Cardiff targeting BAME female indoor workers could only identify three individuals (Sagar et al., 2011). Similarly, while the male escort scene is well-organised in cities such as London and Manchester, other areas do not appear to have a significant male scene (Hester et al., 2019).

Such geographical diversity highlights the importance of local-level data to identify policy priorities and planning service provision. Mapping exercises describe the physical and online spaces where the sex industry operates, identify networks and can provide a rough estimate of the population size, its characteristics and patterns of activity (WHO, 2010). Generally, the process involves defining a geographic scope, contacting a broad range of specialised and non-specialised services, and gathering quantitative and qualitative information on the nature of the sex industry, the locations where it takes place, the individuals involved and their needs. When combined with methods to capture the online industry, such as online surveys, mapping has strong potential to uncover unmet needs and facilitate service planning (Hartworth et al., 2012). Indeed, mapping is used for planning in a range of intervention areas, from supporting bereaved children (Childhood Bereavement Network n.d.) to enhancing rural communities (Creative Rural Communities, 2017).

However, it remains under-used for the study of sex work and prostitution in the UK context. Our systematic review uncovered just two local mapping studies in England and Wales and one regional study in Wales. Barefoot Research and Evaluation (2010) examined the extent and dynamics of the sex market and sexual exploitation in County Durham and Darlington (North England) using a qualitative network mapping approach consisting of structured interviews with a range of professionals. They identified 109 adults to be involved in the local

sex industry. While the use of qualitative data to generate estimates has limitations, the approach allowed identifying populations previously not known to services, including 10 children being sexually exploited. Prompted by a scarcity of specialist services in their area Hartworth et al. (2012) used a mixed approach to conduct an extensive mapping of sex work and prostitution in North East England through interviews with 200 professionals and practitioners from specialist and non-specialist services, who identified service users, other individuals in the industry, as well as locations where paid sex is known or thought to happen. The team then visited those locations to verify the information obtained through observation and interviews and to request further leads. Their iterative process revealed a heterogeneous sex market, with a diverse range of services, locations and prices charged. Moreover, Hartworth et al. (2012) uncovered segments of the sex industry population that were previously unidentified, including exploitation, behind the 'small visible sex market' in the region (p. 87). They estimated around 1000 individuals to be involved in sex work in the area at any given time, and conclude that this invisibility means agencies often fail to realize the range of needs faced by those in the sex industry. Finally, Sagar and colleagues (2014) conducted a mapping exercise for Wales where they engaged 200 agencies and organisations, 100+ sex workers, residents and businesses through interviews, questionnaires and engagement events. The research reported sex work as taking place in all local authorities in Wales. All three mapping exercises identified forms of sex work previously unacknowledged in the area, a strength of the approach.

Complementing traditional mapping exercises, as in the above examples, with surveys can be a powerful approach to access groups not known to services. Online surveys can, at a relatively limited cost, be accessed by potentially thousands of users covering a wide geographical range (Hine, 2016). Enhanced anonymity means that people are more likely to disclose their activities. The downside is that verification can be difficult and researchers' control over the data is reduced, potentially opening the door to misuse (e.g. people other

than the target population responding). Close collaboration and information sharing with specialist and non-specialist services and online platforms can help mitigate these issues. Equally, it is crucial to consider inequality in access to the internet, and trust: vulnerable groups (such as those who are dealing with homelessness, substance misuse and/or who are exploited), as well as those with language and other barriers, are less likely to complete online surveys (Hester et al., 2019). Gathering data through multiple mechanisms and from multiple sources is fundamental to build a comprehensive understanding of the industry.

Mapping can be seen as both costly and potentially putting sex workers at risk. Indeed, the UKNSWP notes that

In many cases, programmers concentrate on commissioning mapping and population size estimates merely to accumulate more data without plans to provide services. This uses up precious resources which could be used to provide services (NSWP, 2015: 1).

The identification of sex workers can also put them at risk. Data collection efforts may have direct effects (e.g. questions may re-traumatise people who have experienced exploitation or violence), but also potential unintended consequences (Sanders et al., 2018). For example, the identification of locations where individuals offer sexual services can be useful for service delivery planning but could also put those selling sex at risk of being 'outed' or targeted for violence or theft. Including input from those currently and formerly selling sex and support organisations, can both ease the collection of data and assist in the prioritisation of safety and ethical procedures.

Indeed, ethical considerations are a crucial aspect of both research and social intervention, even more so when working with potentially vulnerable groups such as those involved in the sex industry. Some sex workers experience harm as a result of police enforcement (SWARM 2018). They may also be vulnerable to 'outing' and/or harassment (NSWP, 2015). Mapping exercises should prioritise the needs and safety of people offering sexual services (Harding



and Hamilton, 2009; WHO, 2010; NSW 2015). This includes ensuring that the mapping is carried out purely to inform local support and service provision, that any data collected is kept secure and that none of the published information can be used for enforcement purposes or to harass or otherwise harm those selling sex (Kingston and Smith, 2020). Researchers and institutions aiming to estimate the prevalence of prostitution and sex work must use approaches that reduce and control bias, as well as balance the potential risks for those in the industry (Walby et al., 2016). Concerns about confidentiality and the protection of vulnerable service users make data sharing challenging for services, and data collection should as far as possible accommodate this, as well as conform to ethical considerations in terms of the privacy of individuals. Involving paid peer researchers –with lived experience in the sex industry –in the mapping exercise, from design through to data collection and analysis to writing up and dissemination, is crucial and can help reduce risks and improve trust. Any local mapping being carried out must thoroughly consider such ethical implications of their research.

When conducted well, the advantages of mapping outweigh its limitations. Gathering data at the local level allows policy and programme planning to be grounded on in-depth knowledge of the population. While no single source has a view of the industry as a whole, a wide range of organisations hold partial data. This includes, as noted, charities and NGOs working directly with and/or carrying out advocacy for people involved in sex work and prostitution, and police, but also other organisations such as health services, other criminal justice agencies such as courts and probation services, local authorities (which in some jurisdictions license venues where sexual services are sold or otherwise monitor the sector), social services, and tax authorities. While all these sources have their limitations, when brought together, they can provide more robust and comprehensive estimates than using one or two sources alone.

We acknowledge that the experiences of those in the sex industry are influenced both by the local context and by the wider legal and social policy frameworks (Brown and Sanders, 2017). Coordinated mapping initiatives would allow comparison within and across regions on the

prevalence and nature of prostitution and sex work, as well as the welfare and needs of those working in the industry, providing key evidence to inform regional and national policies, and interventions. If resources allow, conducting update mappings every few years could help identifying changes in the industry. Updates could also be informed by support organisations who are often aware of emerging or changing needs among their users. Local mapping can focus on particular settings and types of sexual services. However, given that individuals can be involved in various settings simultaneously or over time (Hester et al., 2019), mapping exercises that seek to look at the wider sex industry can help capture information relevant to the wider experiences and needs of individuals, not to mention a wider range of individuals.

## Looking ahead

The (UK) sex industry is thought to be growing as a result of both worsening material conditions for individuals (Alston, 2018) and the expansion of the online industry (Sanders et al., 2018). The characteristics and experiences of those working in the sex industry are also changing, meaning new policy responses are required to respond to new needs and modes of work. We know the sex industry to be widely diverse, dynamic and mobile (Whowell and Gaffney, 2009; Wagenaar and Altink, 2012; Pitcher, 2015; Hester et al., 2019). People in the industry have different trajectories, degrees of control and constraints. Some are victims of trafficking and exploitation. For others, sex work can be empowering, or simply a way to pay the bills (Mulvihill, 2019; Pitcher, 2019). In this context, the selection of sources used to create estimates and breakdowns is not neutral: it determines which voices are amplified and which are left unheard. Relying on partial estimates and incomplete sources is likely to result in biased conclusions that misrepresent segments of the industry and can obscure others (e.g. male or disabled individuals).

This article proposes a wider use of local mapping in England and Wales as a strategy to inform both prostitution policy and service provision. In a context in which the governance

of sex work largely happens at the local level, local mapping can inform service planning and delivery so that it addresses the specific needs of the local population. Indeed, without reliable data on the size and characteristics of the sex industry and those involved in it, it is hard to make policy. Developing local data and information is particularly relevant in light of evidence that the known sex markets may be a small part of the sex industry in the area. Local (and regional) information is key to inform service provision and good policy practice.

Equally, the sex industry is shaped by wider structural and material conditions (e.g. economic and labour market context, the benefits system, national prostitution legislation, gender inequalities and so on) which are beyond the control of local governments and can limit the impact of local initiatives (Brown and Sanders, 2017). However, local mapping has the potential to inform and enrich wider debates on prostitution policy by highlighting the diversity of the industry both within and between locations. In doing so, it has the potential to help practitioners and policymakers move towards a more comprehensive and multifaceted understanding of sex work and prostitution.

Prostitution policy is often informed by moral judgement with little attention to data (Wagenaar and Altink, 2012). Data by itself is unlikely to solve the difficulties of designing prostitution policy. Doing so requires some political will and the development of networks of trust. However, the absence of data that reflects the diversity of the sex industry hampers the development of such policies. Thus, the collection of reliable evidence is necessary, if not sufficient for the development of evidence informed prostitution policy. Mapping can and has been used to understand the needs of and inform planning for other vulnerable populations such as homeless youth and drug users<sup>2</sup>. This approach does not erase the difficulties of researching the sex industry (Wagenaar and Altink, 2012). No source of data is perfect and there is no single perfect solution. Furthermore, data collection involves risks, and thus it is key that activities prioritise the safety of those involved in the sex industry. We propose that if done in collaboration with local actors, enhanced use of mapping can reduce uncertainty

and provide key data to inform service planning decisions. While the results of single mapping exercises cannot necessarily be extrapolated to other areas, or indeed to the national or country level, they can be pivotal to improving service provision and reducing reliance on moral judgement when planning policy. With those aims in mind, counting should come alongside a thoughtful, open and respectful debate on the nature of prostitution and sex work.

## Notes

<sup>1</sup> Police data in England and Wales has been found to have such shortcomings that the UK Statistics Authority stripped police-recorded crime data of its designation a national statistic in 2014 (Public Administration Select Committee 2014).

<sup>2</sup> The WHO (2017) data quality review toolkit provides helpful guidance and Hester et al. (2019) recently published data collection tools adapted to the UK context.

**Funding:** The research that inspired this article was funded by the UK Home Office and the Office of the Police and Crime Commissioner for South Wales. This paper has also received funding from the postdoctoral fellowship programme Beatriu de Pinós, funded by the Secretary of Universities and Research (Government of Catalonia) and by the H2020 programme Marie Skłodowska-Curie grant agreement n° 801370.

**Acknowledgements:** We are grateful to all who contributed to the research, in particular those with direct experience of selling/exchanging sex. This article builds on a study on the nature and prevalence of prostitution and sex work in England and Wales and the Office of the Police and Crime Commissioner for South Wales, carried out in 2018-19. The authors are grateful to our colleagues Professor Marianne Hester, Dr Natasha Mulvihill and Sarah-Jane Walker who were also part of the team which worked on the research on which this article is based. All errors and omissions remain our own.

## References

- Abramsky, J., and Drew, S. (2014) *Changes to National Accounts: Inclusion of Illegal Drugs and Prostitution in the UK National Accounts*, Office for National Statistics. Available at: <http://www.ons.gov.uk/ons/rel/naa1-rd/national-accounts-articles/inclusion-of-illegal-drugs-and-prostitution-in-the-uk-national-accounts/index.html> (Accessed: 05/01/2022)
- Alston, P. (2018) *Statement on Visit to the United Kingdom*, by Professor Philip Alston, United Nations Special Rapporteur on extreme poverty and human rights London, 16 November 2018 [https://www.ohchr.org/Documents/Issues/Poverty/EOM\\_GB\\_16Nov2018.pdf](https://www.ohchr.org/Documents/Issues/Poverty/EOM_GB_16Nov2018.pdf) (Accessed: 05/01/2022)
- Barefoot Research and Evaluation (2010) *Research into sex markets in County Durham and Darlington*. <http://www.barefootresearch.org.uk/hidden-populations/research-into-the-sex-market-in-county-durham-and-darlington/> (Accessed: 28/08/2019)
- Benoit, C. Jansson S. M. Smoith, M. and Flagg, J., (2018) Prostitution stigma and its effect on the working conditions, personal lives, and health of sex workers, *Annual Review of Sex Research*, 55 (4-5), pp. 457-471
- Brooks-Gordon, B., Mai, N., Perry, G., and Sanders, T. (2015) *Production, Income, and Expenditure from Commercial Sexual Activity as a measure of GDP in the UK National Accounts*. Report for Office of National Statistics (ONS) <https://eprints.bbk.ac.uk/17962/1/17962.pdf> (Accessed: 05/01/2022)
- Brown, K., & Sanders, T. (2017). Pragmatic, Progressive, Problematic: Addressing Vulnerability through a Local Street Sex Work Partnership Initiative. *Social Policy and Society*, 16(3), 429-441. doi:10.1017/S1474746416000634
- Changing Lives (2016) *The kind of girl who would to that Durham and Darlington* <http://www.changing-lives.org.uk/wp-content/uploads/2014/01/INTERACTIVE-durham-darlington-peer-research.pdf> (Accessed: 05/01/2022)

Childhood Bereavement Network (n.d.) *Setting up a service: developing childhood bereavement services*  
<http://www.childhoodbereavementnetwork.org.uk/media/13395/factsheet-1-setting-up-a-service.pdf> (Accessed: 15/08/2019)

Coy, M. (2008) 'Young Women, Local Authority Care and Selling Sex: Findings from Research', *British Journal of Social Work*, 38(7), 1408–1424.

Church, S., Henderson, M., Barnard, M. Hart, G., (2001) 'Violence by clients towards female prostitutes in different work settings: questionnaire survey', *British Medical Journal*, 2001; 322:524  
doi: <https://doi.org/10.1136/bmj.322.7285.524>

Creative Rural Communities (2017) *Community Mapping toolkit*. Vale of Glamorgan Council.  
<https://www.valeofglamorgan.gov.uk/Documents/Working/Regeneration/Rural%20Regeneration/community-mapping/community-mapping-booklet-web-english.pdf> (Accessed: 05/01/2022)

Cunningham, S., Sanders, T., Platt, L., Grenfell, P., and Maciotti, P.G. (2018) 'Sex work and occupational homicide, analysis of a UK Murder database' *Homicide Studies*, 22(3), 321-338.

Cusick et al. (2009) Wild Guesses and conflated meanings? Estimating the size of the sex worker population in Britain. *Critical Social Policy*, 29(4), 703-719

Dodsworth, J., (2012) 'Pathways through Sex Work: Childhood Experiences and Adult Identities', *The British Journal of Social Work*, 42(3), pp. 519-536.

ECP (2018) *Submission to the United Nations Special Rapporteur on extreme poverty and human rights*  
[https://www.ohchr.org/Documents/Issues/EPoverty/UnitedKingdom/2018/NGOS/English\\_CollectiveofProstitutes.pdf](https://www.ohchr.org/Documents/Issues/EPoverty/UnitedKingdom/2018/NGOS/English_CollectiveofProstitutes.pdf) (Accessed: 05/01/2022)

- (2015) *Decriminalisation of prostitution: the evidence* <http://prostitutescollective.net/wp-content/uploads/2017/01/Online-Symposium-Report.pdf> (Accessed: 05/01/2022)

Harding, R., and Hamilton, P., (2009) Working Girls: Abuse or Choice in Street-Level Sex Work? A Study of Homeless Women in Nottingham, *The British Journal of Social Work*, 39(6), pp. 1118–1137

Hartworth, C., Hartworth, J., & Convery, I. (2012). Knowledge Mapping & Working with Difficult to

- Reach Groups: Sex Work Knowledge in the City. *Advances in Applied Sociology*, 2(1), 81–88.
- Hine, C., (2016) 'The internet and research methods', in Gilbert, N. and Stoneman, P. *Researching Social Life*. London: Sage. pp. 339-356.
- Hubbard, P. and Prior, J. (2012) 'Out of sight, out of mind? Prostitution policy and the health, well-being and safety of home-based sex workers', *Critical Social Policy*, 33(1) 140–159.
- Import.io (2014). 'How much does prostitution contribute to the UK economy?' *Medium*. October 16, 2014.
- Jeal, N, & Salisbury, C. (2007) 'Health needs and service use of parlour-based prostitutes compared with street-based prostitutes: a cross-sectional survey', *BJOG: An International Journal of Obstetrics and Gynaecology*, 114(7), 875–881.
- Jones, K.G. Johnson AM, Wellings K., et al. (2015) The prevalence of, and factors associated with, paying for sex among men resident in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3) *Sexually Transmitted Infections*, 91, pp. 116–123.
- Kingston, S., Smith, N., (2020) Sex counts: An examination of sexual service advertisements in a UK online directory. *The British Journal of Sociology* 71, 328–348. <https://doi.org/10.1111/1468-4446.12727>
- Kinnell, H. (1999) 'Sex Workers in England and Wales: Europap-UK Briefing Paper for Department of Health, National Sexual Health Strategy'. EUROPAP.
- McMillan, K., Worth, H. and Rawstone, P. (2018) 'Usage of the Terms Prostitution, Sex Work, Transactional Sex, and Survival Sex: Their Utility in HIV Prevention Research', *Archives of Sexual Behavior*, 47(5), pp. 1517-1527.

Matolcsi, A., Mulvihill, N., Lilley-Walker, S., Lanau, A and Hester, M. (2021). The Current Landscape of Prostitution and Sex Work in England and Wales. *Sexuality & Culture* , 25, pp. 39-57  
<https://doi.org/10.1007/s12119-020-09756-y>

Mulvihill, N. (2019) 'Is it time drop the term "prostitution" from policy discourse?' *Journal of Gender-Based Violence*, 3(3) October 2019, pp. 385-393(9)

Mutagoma, M., Kayitesi, C., Gwizs, A. Ruton, H, Koleros, A., Gupta, N. Balisanga, H., Riedel, D.j. and Nsanzimana, S., (2015) 'Estimation of the size of the female sex worker population in Rwanda using three different methods', *International Journal of STD & AIDS*, 26(11), pp.810-814.

Network of Sex Work Projects (2015) *Mapping and population size estimates of sex workers proceed with extreme caution*. Policy Brief <https://www.nswp.org/resource/mapping-and-population-size-estimates-sex-workers-proceed-extreme-caution>. (Accessed: 05/01/2022)

NUM (2018) *National Ugly Mugs statement on the All-Party Parliamentary Group on Prostitution and the Global Sex Trade's report 'Behind Closed Doors - Organised Sexual Exploitation in England and Wales'* <https://uknswp.org/um/press-room/num-statement-on-the-appg-on-prostitution-and-the-global-sex-trade/> (Accessed: 22/07/2019).

O'Neill, M. Jobe, A., Bilton, C., et al. (2017) *Peer Talk: Hidden Stories A Participatory Research Project with Women Who Sell or Swap Sex in Teesside*. Project Report. A Way Out, Stockton-on-Tees <http://dro.dur.ac.uk/22993/> (Accessed: 15/08/2019)

ONS (2019) *Crime in England and Wales: year ending March 2019*. <https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/crimeinenglandandwales/yearendingmarch2019> (Accessed 05/01/2022).

Overall, C., (1992) 'What is wrong with prostitution? Evaluating sex work', *Journal of Women in Culture and Society*, 17(4), pp.705-724.



- Pitcher, K. (2015) Direct sex work in Great Britain: reflecting diversity, *Graduate Journal of Social Science*, 11(2), pp.76–100.
- Public Administration Select Committee (2014) *Caught red-handed: Why we can't count on Police Recorded Crime statistics*. Thirteenth Report of Session 2013–14. HC 760. London: House of Commons.
- Sagar, T., Jones, D., Croxall, J., Tyrie, J. & Chimba, M. Locating female black and minority ethnic off street sex. [Online] <http://cronfa.swan.ac.uk/Record/cronfa17434>
- Sagar, T. and Croxall, J. (2012) 'New Localism: Implications for the Governance of Street Sex Work in England and Wales'. *Social Policy and Society*, 11(4) pp., 483-494.
- Sagar, T., Jones, E., Jones, D., Clark, L. (2014) Sex work research wales 2010-2014. Summary of findings. Gibran: Swansea.
- Sagar, T., Jones, D., Symons, K and Bowring, J. (2015) *The student sex work project*. Research Summary. Swansea University <http://www.thestudentsexworkproject.co.uk/wp-content/uploads/2015/03/TSSWP-Research-Summary-English.pdf> (Accessed: 05/01/2022)
- Sanders, T., Scoular, J., Campbell, R., Pitcher, J and Cunningham, S. (2018) *Internet Sex Work. Beyond the Gaze*. London; Palgrave Macmillan.
- Sanders, T., (2013) *Sex work: a risky business*. London: Willan.
- Sanders, T., O'Neill, M., & Pitcher, J. (2009) *Prostitution: sex work, policy and politics* (1st ed.). SAGE Publications Ltd.
- Shannon, K., Kerr, T., Strathdee, S. A., Shoveller, J., Montaner, J. S. and Tyndall, M W (2009) *British Medical Journal*, 2009, 339:b2939. DOI: <https://doi.org/10.1136/bmj.b2939>
- Shaw, I. Bloor, M. Cormack, R. and Williamson, H. (1996) 'Estimating the Prevalence of Hard-to-Reach Populations: The illustration of Mark-Recapture Methods in the Study of Homelessness', *Social Policy and Administration*, 30(1), p. 69-85.
- Shaw, I. and Butler, I., (1998) Understanding young people and prostitution: a foundation for practice? *British Journal of Social Work*, 28, pp.177-196.

Voices Heard Group (2008) *Hidden for Survival. Peer research into the lives of sex workers within Newcastle, Gateshead, Sunderland, South Tyneside and North Tyneside*. Research Study TC-02 <http://womensbreakout.org.uk/blog/hidden-for-survival-peer-research-into-the-lives-of-sex-workers/>

Wagenaar, H., Altink, S. (2012) Prostitution as Morality Politics or Why It Is Exceedingly Difficult To Design and Sustain Effective Prostitution Policy. *Sex Res Soc Policy* 9, 279–292 <https://doi.org/10.1007/s13178-012-0095-0>

Wagenaar, H. Altink, S. and Amesberger, H. (2017) *Designing prostitution policy: Intention and reality in regulating the sex trade*. Bristol: Policy Press.

Walby, S., Apitzsch, B., Armstrong, J., Balderston, S. Follis, K., Francis, B. Kelly, L. May-Chahal, K., Rashid, A. Shire, K., Towers, J., Tunte, M. (2016) *Study on the gender dimension of trafficking in human beings*. Luxembourg: European Union.

Ward, H, Mercer, C.H., Wellings, K., Fenton, K., Erens, B., Copas, A, Johnson, A. M. (2005) Who pays for sex? An analysis of the increasing prevalence of female commercial sex contacts among men in Britain. *Sexually Transmitted Infections*, 81, p.467-471. <https://sti.bmj.com/content/81/6/467.short>

WHO (2017) *Data quality review toolkit*. WHO. [https://www.who.int/healthinfo/tools\\_data\\_analysis/dqr\\_modules/en/](https://www.who.int/healthinfo/tools_data_analysis/dqr_modules/en/) (Accessed: 05/01/2022)

– (2010). *Guidelines on Estimating the Size of Populations Most at Risk to HIV*. Geneva: World Health Organization.

Howell, M., and Gaffney, J., (2009) ‘Male sex work in the UK: forms, practice and policy implications’, in Phoenix (ed.) *Regulating sex for sale: Prostitution policy reform in the UK*. pp. 99-120. DOI: 10.2307/j.ctt9qgvwj.11

Work and Pensions Committee (2019) *Oral evidence: Universal Credit and “survival sex”*, HC 2025 <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/work-and-pensions-committee/universal-credit-and-survival-sex/oral/103092.html> (Accessed 28/08/2019)