

# NOT-EQUAL

## EPSRC NetworkPlus: Social Justice through the Digital Economy

### Project Final Review Form

Please submit this form within one month of completing your project to [notequal@ncl.ac.uk](mailto:notequal@ncl.ac.uk).

GENERAL INFORMATION	
<b>Lead Applicant (PI):</b> Dr Vasilis Vlachokyriakos <b>Email address:</b> <a href="mailto:vasilis.vlachokyriakos1@ncl.ac.uk">vasilis.vlachokyriakos1@ncl.ac.uk</a> <b>Job Title:</b> Lecturer of HCI <b>Department:</b> School of Computing <b>Organisation:</b> Newcastle University	<b>Co-Investigators (names and organisations):</b> Dr Rachel Clarke, Newcastle University <b>Supporting Partner(s):</b> Sociality, UWAH, Angelou Centre <b>Project Title:</b> Designing Security Infrastructures for Communities with Sensitive Data (DeSIC) <b>Project Reference Number:</b>

#### 1. SUMMARY

*Please outline the research challenge and question your project aimed to address, in less than 100 words.*

State based approaches to data security have been criticised by feminist scholars (Hudson, 2005; D'Ignazio and Klein, 2020) who call for a more nuanced understanding of the specific practices that take place when women's diverse cultural experiences of personal security are brought to the fore. Research from human-centered and experience-centered design perspectives also highlights the limitations of design when not responding to the relational perspectives involved in maintaining digital security in an increasingly interconnected world (Dunphy et al., 2014; Kocksch et al., 2018). Our research therefore sought to a) contribute to the development of a conceptual and empirical understanding of what security means for organisations involved in supporting women victims of cross-cultural gendered forms of violence; and b) develop methodological approaches and socio-technical tools that help sensitize designers and researchers to the work involved in the day-to-day sensitive data management practices.

#### 2. APPROACH

*Please provide a summary of the approach of your research project, including any deviations from your work plan, the reasons for this and how you addressed any issues.*



## Ethics and project setup

As the project involved access to organisations that work with vulnerable groups, and more specifically talking to gatekeepers in these partner organisations, the first 2-3 months of the project (October - December) we focused on getting an ethics application submitted and approved, while also thinking about conceptual frameworks and research methodologies in relation to data feminism and positive security.

For the latter we had an initial meeting between the project's core team (Yannis Efthymiou, Rachel Clarke, Vasilis Vlachokyriakos) and Professor Lizzie Coles-Kemp and Dr Rikke Jensen from Royal Holloway, where related literature and a possible re-configuration of our research approach was discussed. The core project team has been meeting bi-weekly to discuss developments and next steps.

## Methodology

More generally, the data collection and analysis approach taken can be split in two phases:

- Phase 1: Qualitative interviews and preliminary analysis; and
- Phase 2: Prototype development and workshop with women survivors

### *Phase 1:*

The first 1-3 months of 2021 (January - March) we focused on: i) having introductory meetings with the Angelou Centre and UWAH; ii) organising interviews/focus groups with staff members of both organisations; iii) creating an interview guide that relates to the conceptual framing of the project; and iv) undertaking a preliminary analysis of the qualitative data collected.

Interviews and focus group discussions were conducted remotely using Zoom and transcribed for later analysis. We interviewed three staff members from the Angelou Centre and two staff members from UWAH. Staff from the Angelou presented a range of different experiences across the team from collecting, organising and sharing data with other organisations supporting women. Our interview questions focused on two main areas: i) the broader organisational context and values, such as the types of services provided to beneficiaries in each organisation, how these services are being designed and executed and why; and ii) "data journeys" paying particular attention to what data is captured, how it is captured, processed and stored, when/if/how data is shared, with whom and for what purposes.

### *Phase 2:*

From April onwards we have focused on gaining further perspectives on women survivors' experiences of data security, analysing our data, and developing a prototype.

As a way of gaining further insights into the perspectives of women survivors and their experiences of these data journeys, we ran a workshop with the Angelou Centre's Women's Voices group. Women who attend these sessions are survivors of domestic violence living in safety, but either still need support or wish to provide support to others. The sessions were designed as a drop-in for women where they can gain advice from staff but also collective community support for each other as a form of solidarity building. In discussion with Angelou Centre staff who raised the issue that women may find it hard to talk about data in the abstract, and by taking into account an initial analysis of the data collected in phase 1 of the project (see below for findings), we developed a series of visual scenarios using fictional characters to consolidate our preliminary analysis of interviews, focusing on potential harms experienced by women. These scenarios represented different aspects of data collection, storage and sharing, particularly where there was a particular concern identified by staff about data security. The scenarios

consolidated concerns raised by staff on sharing information with the police and social services and family court and solicitors accessing information on women's personal circumstances, including data on physical and mental health and family histories.

### 3. ACTIVITIES & OUTPUTS

*Please list any outputs from your project to be entered in the Not-Equal Researchfish submission. These include events, publications, workshops, webinars, invited talks, media coverage and tools (please include links to open source, git-hubs if relevant) that have resulted from your project.*

*Please include the following for each entry:*

**Title: Women's Voices Group workshop**

Date: 21st June 2021

Type of Event: Workshop

Number of People Reached: Presentation - 13

Primary Audience: Women survivors of domestic violence accessing services at the Angelou centre

Key Outcomes/Impact:

- Reporting to social services and the police can be problematic for women experiencing domestic violence and can lead to mistrust and women not disclosing key information due to fear of harm to themselves or children.
- Data and information collected by agencies shared with the courts can be used by the perpetrator to discredit women's accounts of abuse.
- Women survivors are held much more accountable for evidencing and reporting on their good parenting skills than abusers are even when women are no longer living with perpetrators.
- Recognition of these wider issues of data sharing were considered important for women to discuss amongst themselves since this highlighted key learning for staff and women to share amongst themselves.
- Desire for women survivors and staff to share their findings with social services and police to help highlight these specific challenges.

URL: Presentation Link

[https://docs.google.com/presentation/d/1wKu1YrVJs95jn8rEt\\_yK9PF7xQaRizPNaXRO5Op\\_i2s/edit?usp=sharing](https://docs.google.com/presentation/d/1wKu1YrVJs95jn8rEt_yK9PF7xQaRizPNaXRO5Op_i2s/edit?usp=sharing)

**Title: Community report (findings and future directions)**

Date: TBC

Type of Event: Dissemination of report

Number of People Reached: TBC

Primary Audience: Organisations active in providing support to women victims of gendered domestic violence

Key Outcomes/Impact:

- A community-facing report will be put together (we didn't have the time to do this yet) that will be distributed to the organizations that we worked with (and other similar organizations and communities) enlisting actionable steps for information and data management in such contexts. Such report aims to inform future next steps through reporting on best practices, while also act as a sense-making tool for future funding applications.

**Title: Digital open-source data management tool**

Date: N/A

Type of Event: Open-source repository

Number of People Reached: N/A



Primary Audience: third sector organisations

Key Outcomes/Impact:

- Sociality cooperative and Yannis Efthimiou designed and developed a system for the data management of third sector organisations supporting women that are victims of gendered domestic violence.
- The tool is in a very preliminary stage of its development (which is to be expected in such short timescales / projects) but it is the first step towards designing a bespoke tool for data management in such a context.
- The system also served as a research method – it was presented and discussed in a workshop with women from the Angelou Centre and it prompted conversations about information/data exchange, sharing and ownership

URL: <https://gitlab.com/sociality/desic-not-equal-app>

Title: **Open-source DESIC project website**

Date: N/A

Type of Event: Open-source repository

Number of People Reached: N/A

Primary Audience: N/A

Key Outcomes/Impact:

URL:

- <https://gitlab.com/sociality/desic-not-equal-app>
- <https://www.desic.io/>

#### 4. INSIGHTS & IMPACT

*Please describe the findings of your project and their significance in relation to potential or actual social impact.*

Below we report on our findings that stemmed from the first and second phase of our engagement activities with the two organisations as described in section 2 above.

##### **Phase 1: Preliminary analysis of interviews**

A preliminary thematic analysis of the data has been conducted and is presented below. For the purpose of this project, the transcripts were coded deductively in order to come up with a list of functional requirements for designing and developing a digital prototype. The aim of the prototype is not to provide a solution to a well-specified problem, but to be used as a system that will allow us to conduct further design research activities (i.e. a design workshop with staff from the two organisations that was conducted in phase 2). This deductive analysis resulted in the following broad themes, namely: information safekeeping and sharing; access to data and classification; and communication.

##### *Information safekeeping & sharing:*

We have found that within such small organisations all members are involved in different aspects of data management and collection with varying degrees of access to sensitive files. Staff who are involved in communicating to different services such as social services and police have access to all women's files and share minimal details with these services and do so very carefully so as not to cause future potential harm with anticipated court cases.



More specifically, staff at the Angelou changed their data collection strategies based on funders and government policy, in particular to highlight ethnic, racial and violent intersections as much as possible. Data about women were not always possible to share, other than printed files that were kept securely locked at the centre.

The UWAH on the other hand has a different mode of operation. The Angelou Centre has a more holistic approach, while UWAH focuses on consultation and psychological support. UWAH is not as developed in relation to technology use within the organization or in relation to how the organization stores and shares information with other stakeholders. UWAH follows an ISO standard for data collection and safekeeping, which consists of sorting and storing files in print within a “locked drawer”. On the other hand, Angelou has dedicated password protected servers to safekeep these files electronically.

#### *Access to data and classification:*

Despite their differences, staff from both organisations noted that administration members have different levels of access to the women’s personal data and information. Both organisations use forms to classify data. The forms are present in every step of their contact with the women they support. From front-desk communications to mental health assessments. Particularly, a staff member from the Angelou Centre called themselves “queens of forms”.

The staff from Angelou told us that they type all information during the meetings with women, while the UWAH writes them down. For UWAH this poses a problem which is costly, time-wise and sometimes tedious. *“Our forms are designed in a way that resembles note taking in order keep them light and not overwhelm the experts. All of these forms are handwritten and rarely printed. They are kept inside the aforementioned locked drawers and are categorized by case and by date.”* [UWAH staff member]

#### *Communication*

Communication with the women before the COVID-19 pandemic for both organisations happened either by beneficiaries dropping-in or by phone. During the past year communication channels have changed and mostly take place through social media (Facebook, etc.) and emails. A member of staff from the Angelou Centre, while highlighting the problems with using email, commented that they couldn’t always trust if women’s messages weren’t being looked at by their partners or even written by them.

## **Phase 2: Prototype development and workshop with women survivors**

In the second phase of our project we designed and developed a low-fidelity prototype; an administrator system for data management within such contexts, informed by the three broad themes of findings reported above. We then conducted a workshop with women survivors and staff of the Angelou centre, designed to enable them to reflect on the three themes above (information sharing and safekeeping, access to data and classification, communication), while also prompting them to give us feedback in relation to the low-fidelity prototype. In this section we report on the developed system and the more concrete findings that we created from an analysis of the interview and workshop data.

### **Technical Design / DESIC system**

To address the initial findings from our work with the organisations we decided on the following design directives:



The application is split in two parts. One for the administration, to be mainly used by staff members of such organisations and the other for the women (i.e. beneficiaries). The **admin app** consists of forms that map the data each organisation needs to have on each case.

Incidents

Incident (ID: aac821f5-bdfa-4931-8d2f-015c61f1b5af)

**Beneficiary**  
Maria Pappas

**Title**  
What is Lorem Ipsum?

**Keywords**  
typesetting, Letraset, passages

**Category**  
General Category

**Date**  
Jan 20, 2021

**Description**  
Lorem Ipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has been the industry's standard dummy text ever since the 1500s, when an unknown printer took a galley of type and scrambled it to make a type specimen book. It has survived not only five centuries, but also the leap into electronic typesetting, remaining essentially unchanged. It was popularised in the 1960s with the release of Letraset sheets containing Lorem Ipsum passages, and more recently with desktop publishing software like Aldus PageMaker including versions of Lorem Ipsum.

EDIT  
EXPORT TO PDF  
DELETE

Figure 1. Example of an incident form

All data is encrypted in the front-end of the application and then is mapped onto the database. This functionality will give the opportunity to UWAH to change their *locked drawer* for something more secure.

The **admin app** has the functionality of giving specific access rights. The administrator of the organisation has CRUD access on all data on the application and staff members have limited access pertaining to their expert domain.

Members

**Marital Status**  
In a relationship

**Employment Status**  
Unemployed

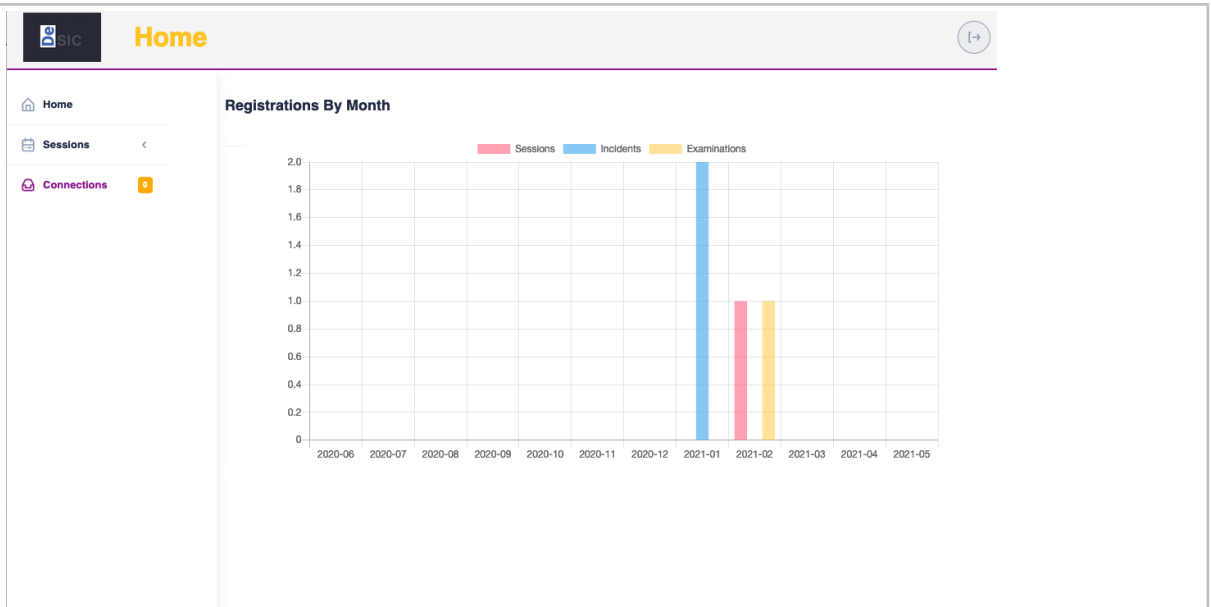
EDIT  
EXPORT TO PDF

**Update Access Rights**

SO	Social One Read & Write in Social Documents	No Access
LO	Lawyer One Read & Write in Law Documents	Access
DO	Doctor One Read & Write in Medical Documents	Access
LT	Lawyer Two Read & Write in Law Documents	Access

UPDATE

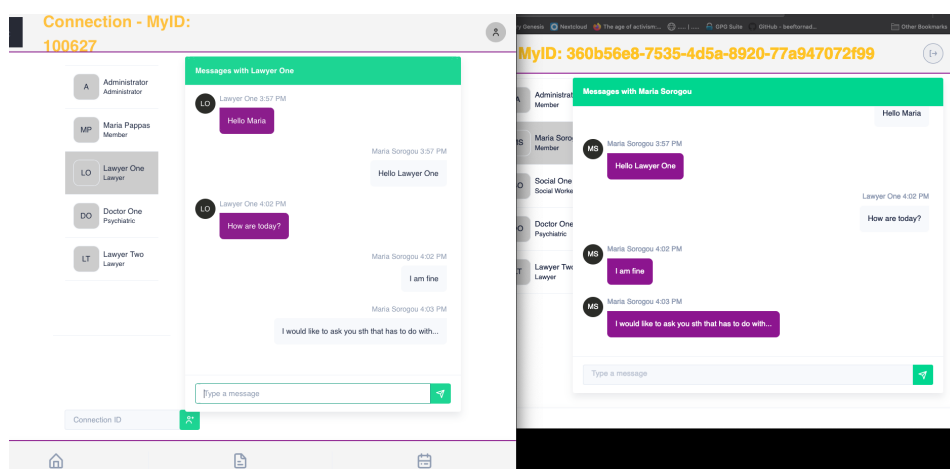
This functionality will make it easier for the organizations to separate concerns for security and privacy reasons. In addition the **admin app** provides basic visual representations of data.



This feature is put together in order to help the organisations make meaningful decisions about their cases and their workflow. At the same time provide a sound basis on which they can make projections and interpretations of these data for specific uses (sharing with other organisations, public authorities, etc.).

The **client app** is designed having the women’s needs in mind. Meaning inside this application each woman has access to the data concerning her case. She can give access to these files to certain members of the staff and at the same time revoke access to them. This is a procedure that can happen in coordination with the organisation administrator. The administrator can make suggestions to a woman telling her to give access to a particular staff member with the woman having the right to disagree.

Also, the **client app** serves a means of communication between the organisation and the women by letting them know when certain activities are available, and providing them with the functionality to **chat** with each other. The chat is end-to-end encrypted. Moreover, beneficiaries can chat with each other within the application by exchanging a small key. Conversations do not stay inside of the application, and stay live while the application stays open.



This functionality will create a safe space where women can chat with each other and staff, as well. Keeping far from mainstream routes for communication (such as facebook) and thus creating a more secure and private space. This feature is barebones and does not entail anything fancy or high-end in order to offer an easy and alternative way of communication for women who might not be tech savvy.

## **Findings: Data Practices and Challenges**

### *Existing data management & sharing practices*

A woman's journey into these organisations starts at the front-desk. Women most of the time make their first contact either by phone, emails, social media (mainly Facebook) or by physical presence (pre-COVID19). The staff of the organisations firstly accumulates demographic data followed by more detailed accounts pertaining to each case, like children and perpetrator details. Most of these data are collected in forms, a tool these organisations use extensively. Filing out these forms can take place via digital means or in some cases is paper based depending on the technological competence of each organisation. Both quantitative and qualitative data are collated; the first are for the most part needed when the organisations have to deal with state services and the latter when they refer to a particular woman's case.

Primarily data from these forms are then used to assess the danger a woman is in the given moment when she makes first contact. Then, these data take different routes depending on organisational needs and the needs of women. One route covers the internal needs of the organisations that have to do with profiling or classification. The other has to do with aggregating, interpreting and contextualising data in order to prepare the organisation for an overall contact with public services, making cases in a court, reporting to funders and sharing information with other agencies, policy makers etc. So, sharing of information and data serves several purposes and has to adapt to several use cases.

A prominent example is how these organisations struggle to have various forms of violence apart from physical, acknowledged by the public agencies and institutions. These forms of violence refer to state and institutional violence, racism, sexual abuse, digital abuse, trafficking and other structural inequalities. Thus, by presenting quantified aggregated information, a practice that speaks to hearts and minds of state agencies and institutions, these organisations have strong arguments in order to promote such a recognition.

### *Data challenges*

However, the above routine holds potential harms for women which stem from data collection and disclosure. What is being collected and recorded is as sensitive to what is being shared and how. One crucial challenge is misinterpretation of data. Misinterpretation of data from public services and institutions which for instance perceive poverty as a sign of negligence. Deduce that living with the perpetrator is a sign of negligence rather than a sign of deprivation and of thrift access to public funds.

Other aspects that are potentially harmful for the women are the multiple precarious aspects surrounding the context of a woman, such as her racial profile or her family's profile. Criminal activity of partners and other personal and familial harms, which may slip into reports or are otherwise inappropriately shared, can severely damage a woman's case in court, for instance.

*“Basically, everything on that form becomes a criminal activity, so if something's reported where a woman says, well, he was dealing weed or he was doing this, or whatever.”*



Moreover, public services or the police are lacking proper procedures, security measures or protocols that need to be followed when dealing with sensitive cases. There are times when actions are taken, based on information shared, without understanding the personal consequences this can have for women. As a staff member in one organization pointed out:

*"[...] for example, a woman, of high risk, where the police turn up in a uniform just to check something out because I've had a referral. Even though the referral says, do not go to the address [...]"*

Along with the lack of proper procedures and protocols there is also the problematic data collection from public services and agencies, when several critical information like, immigration, status, ethnicity, sexuality are often wrong or left blank. Depriving the women or the organization from accurate information which could be used in courts, etc. Moreover, security breaches from social services are very common. Some services use insecure channels of communication and share very sensitive information in an irresponsible manner.

*"[...] evidence about women and they just use insecure email or you just reminded me somewhere that's quite interesting Home Office are probably one of the worst [...] they've like directly sent emails [...]"*

Structural discrimination which is built upon discriminatory legislation is another challenge that the women face, a process that is complimented by the fact that boards, committees and courts are predominantly comprised of cis, white male public servants, who lack the ability to understand the entanglements of what it means to be a minoritized woman.

*"[...] just like the domestic abuse bill they go to exclude migrant women, how the hell, do you do anything around, how do you even look at this stuff around data if these women don't even exist within a bill of protection."*

The organisations find themselves with a huge volume of data at their disposal. This can often lead to complexity where knowledge extraction can be very difficult.

*"[...] sometimes it will take me hours just going through documents and spreadsheets to actually get that information and that can be quite problematic [...]"*

The process of making the interpretations needed in order to succeed in creating a specific case for a woman, becomes excessively cumbersome and usually it's something that only few people can deal with. While, digital systems and similar tools, according to staff, lack the parameters or aren't accessible thus imposing ways of doing to organisations rather than the other way round.

*"[...] really should have systems that everybody can kind of access and touch on, rather than just a few people like kind of understanding the maze of information."*

## **Findings: A Typology of Security practices**

Four domains of intersecting digital security practices and how often harm or fear of harm for women came about as they shared information with different services. Technical, procedural, curatorial and community based:

### *Technical Security Practices*

Within the Angelou Centre what was described in terms of technical practices included password protected files, encryption and secure servers to ensure different personal files on women's cases stayed secure. How this was managed was largely through spreadsheets and word files, including files that documented the preliminary referral of a case, with basic information on ethnicity, types of abuse and contact details for follow-up. While these digital files had largely been administered onsite through localised secure servers this had also been accompanied by simplified paper files in locked cabinets. However once lockdown started and during this period where women and staff could not access the office, they were transitioning to an all-online client management system that would help them aggregate their data while maintaining specific information on women's personal stories. Staff involved in this process also highlighted that there was a lack of understanding from the software developers technically delivering on the system and the complexity of the Centre's needs needing to report to a range of different agencies, from funders, local authorities and government departments.

This was considered important to have both the macro and micro view of data. Macro views of aggregated data helped keep particular cases anonymous but helped highlight local and national trends of abuse and service provision and further helped secure funding for specific pieces of work. Micro views of more personal stories helped to contextualise and specify how those figures translated into direct experience for women.

In terms of direct security benefits for women, the collection of data by a third-party organisation such as the Angelou Centre was vital in helping to evidence and legitimise her story to proceed with court cases and to secure British citizenship. Without organisational data collection with dates of events when abuse had occurred, then women struggled to build a convincing case that could jeopardise court cases towards convicting their partners, securing the safety of their children and limiting custody, and reducing risk potential deportation that could risk further ostracization and violence from family in the country of birth. If safe to do so a physical paper copy of a safety plan was given to a woman to ensure she knew what to do, if she felt threatened or at risk. The physical safety plan was however only shared if women had left the relationship. For many of the women this physical paper document could also present further risks if they were still living with the perpetrator and family and so had to be kept at the Centre for review at meetings.

In understanding these specific security risks staff further highlighted the complex network not only of the data collected and shared within the organisation, but how this data interfaced with many different organisations, police, social services, Ministry of Justice, Home Office, court, solicitors, NHS, and within multi-agency risk assessment conferences (MARAC), where representatives from these services came together to make decisions on the immediate risks that women faced to make collective decisions about her safety, health and wellbeing. In communicating with these different agencies, different technical systems were used for each agency, with different online systems, logins, passwords and encryption protocols to upload and share information. Despite what may appear a reasonable level of technical protection afforded to these systems, breaches were also described where sensitive information was sometimes shared by agencies over email due to staff changes or lack of training. Because of this, and due to issues of trust, which will be discussed more in curatorial security practices, staff described how they were often very careful and selective about what was shared, often editing and selecting only the basic information that was needed by each agency.

### *Procedural Security Practices*

Angelou Centre staff evolved several additional practices and rules to apply to the more technical application of security practices that provided additional levels of security to protect women from

perpetrators and their families. These had evolved due to experiences of staff and women being put at risk through a lack of cultural awareness from other services of how challenging it was for many women to leave the family home safely and how long this could take. For example, if a woman had called and staff needed to get back in touch with her, they would ask for the most appropriate times to call or would only leave messages on women's phone that would mention generic training because the Centre also provided learning opportunities, too. On their own out of hours answer machine messages they would not mention domestic violence support. This was as a precaution if perpetrators checked who a woman had been talking to on her mobile phone, which was common. Staff also described how perpetrators would also sometimes phone or email and ask for information about a particular case pretending to be the police, social services or a solicitor, so they had learnt to check these identities within their team and go through familiar contacts with those services ensuring this was well documented.

Some of these more procedural practices included explicitly highlighting to police and social services not to go to the woman's house at all, or at certain times of day because this could potentially result in the family and perpetrator becoming aware she had asked for help and risk further violence or restrictions from leaving the home or loss of phone. This was particularly problematic for women as many of the police did not understand how this could further place a woman at risk and the process of ensuring a woman was safe from harm.

One area where women expressed significant concern was in the area of children's safeguarding, where children's safety was prioritised at the cost of women. Children could therefore be removed from the family home before a woman was safe that would lead to further harm from perpetrators. This was a cause of concern and significant emotional stress for women. Furthermore, if a woman did leave the family with her children and proceed with a court case to limit custody, they often felt they needed to continue to evidence perpetrator harm to the children and them, while evidencing how they were good parents. In this sense women felt the documentation procedures of court and social services did not recognise the significant emotional labour involved in justifying and evidencing harm from perpetrator and their own ability to parent well, and often did not scrutinise the perpetrator in the same way, where they were left to get away with continuing harmful behaviours at a distance.

At the same time the documentation practices of the Angelou Centre were considered by staff and women to foster trust. From a staff perspective they saw this being achieved by working with a multi-lingual team, being more culturally aware of many of the women's circumstances and explaining to women what would happen at each stage. Staff explaining procedures and what would happen next for women was considered an important part of building trust.

### *Curatorial Security Practices*

Both staff and women described how they would 'curate' what was shared across services. How curation happened was less a set of formalised rules and procedures, but more of an expert sensitivity towards particular women's needs or women being more cognisant and fearful of potential consequences if they did or did not share specific types of information with other agencies. In this sense this type of security practice was very much future oriented and considered a complex intersection of knowledge and understanding, from what had happened in previous similar cases, shared understanding with staff and understanding trends and concerns across a national network of third-sector organisations working to prevent violence against women and girls.

Some staff for instance mentioned the weaving together of numerical data, statistics, and anonymous testimony to organisations when advocating for changes to be made at a strategic national and regional

level. Some staff this more curatorial practice took place in MARAC meetings where care had to be taken not to reveal too much so as information might not be used in courts against women.

For women they described sometimes withholding information due to a lack of trust with agencies such as social services and the police in particular, because they felt they did not have the women's best interests. This was in particular for children's safeguarding where if women disclosed the extent of the violence they felt children may be removed from their care and this was a huge risk. This aspect of withholding information however also presented further risks for women, which they also recognised because they could be considered to be uncooperative or at worst lying and that this could be used in court against them. As mentioned before though, the documentation of key facts and dates of a woman's abuse, also served as important evidence for her case and the more services were involved in documenting a woman's case in her favour, the more likely she would benefit from a positive court outcome. This curatorial security practice therefore seems to present a problematic double bind (Bateson) for women that requires the support of others to help navigate. For the Angelou Centre staff in particular, what they described was the challenges of other services understanding the interconnectedness of issues of ethnicity, race, immigration, and abuse that these cases involved and this lack of understanding risked services further exacerbating violence by applying undue pressure to women or by acting inappropriately and revealing that women had asked for help and seeking refuge from the violence.

### *Community Security Practices*

While the first three security practices highlight organisational structures and expertise, in this final aspect, community security practices are what we saw described from the women's voices group. This largely comes out of women living within particular communities and accessing services at the Angelou that help to support each other and help build solidarity.

In the first instance women highlighted the significance of neighbours' roles in contacting services and helping them. For instance many women highlighted that it was their neighbours that had saved them because they themselves could not contact the police or social services as they did not have the confidence or knowledge to do so. Despite this, neighbours, while could helpfully support the safety of women and flag this up with services, this could sometimes be further misunderstood. One woman's example highlighted how a neighbour did contact services to support her, but they came to the house while the perpetrator was there. He denied any violence and the woman felt she could not say anything about the abuse while he was there. The neighbour then stopped helping, due to a lack of understanding of her situation.

Sharing information via social media could also be construed as problematic in the wider community. For instance some women felt the need to share images and updates on social media platforms to keep in touch with their wider networks, but this could also put them at unnecessary risk. Other women sometimes unknowingly shared information about other women's circumstances on social media without understanding the potential consequences and harms. Many of the perpetrators were also part of wider community networks that would track women down via these platforms, once women had left the family home. Cyberbullying was also a growing concern within the community of women at the Angelou Centre and training was considered vital to support women in this area, that staff felt they struggled to keep up with.

In line with curatorial security practices, during the women's voices group session, women discussed their distrust of social services. This mistrust came from personal experience but also through wider community knowledge about children being removed and misunderstanding women's motivations for not

disclosing all information about the perpetrators behaviours and social services suspecting women for colluding or protecting the perpetrators and putting their children at risk. The Women's Voices Group sessions appeared to be a useful forum for these issues to be discussed and for practical advice and discussion to help women make sense of these issues and other concerns associated with court cases and social services. Community security practices are therefore a further way in which women could share experiences and learn from others who had been through similar processes, while being supported by professional third-sector staff.

## 5. REFLECTIONS & FUTURE DIRECTIONS

*Please list the key highlights from your project, summarize any lessons learned from this work and outline any future directions or plans to continue activities beyond this project.*

### Lessons learned and future directions

#### 1. Understanding security practices

While the project has delivered on most of the stated deliverables in particularly difficult circumstances under lockdown, understanding some of the more specific technical aspects and security practices in detail within these organisations has been challenging. We have needed to rely on online interviews and online workshops which have highlighted the limitations of organisations being able to describe some of the work practices involved in managing sensitive data on a day-to-day basis. This is because most of what is done is often taken-for-granted, tacit, invisible and embodied forms of knowledge. We have therefore had to find ways to scaffold support for staff and women survivors to help surface and articulate their experiences of managing sensitive data more broadly. This has also meant using the word 'information' rather than data sometimes to get at some of the key security challenges these organisations face as they work in an increasingly interconnected world. More dedicated work could therefore focus on ethnographic and participatory action research to observe and document these security practices more thoroughly so they can be more fully understood and sensitively designed for. However, this also presents further challenges as care needs to be taken not to disclose some of these practices so they can be left vulnerable to potential misuse.

**2. Understanding existing digital and material infrastructures:** Related to the above, due to the way in which we conducted our studies online, it was also challenging to understand the specific digital and material resources being utilised within the organisations to support security practices. For example, the Angelou Centre had had to make all their secure servers available to staff remotely during lockdown and were in the process of setting up a new client management system to help better manage their files and data. While this gave one of the staff who was learning this process particular insight into the challenges of setting up a new system in relation to the organisational practices they wanted to uphold, it was difficult to fully understand how this would structure information and access for staff. As such, we feel that even though this small-scale project contributed interesting insights, especially in relation to the different types of security practiced in such contexts, it is only a small first step towards a much larger design space of technologies for organisations that support women victims of gender based domestic violence. In future work, and after longer-term and more ethnographic engagements with such organisations, we would like to more concretely report on how the different typologies of security (discussed above) are materialized in digital and/or physical infrastructures; While also involve women and staff in design-led research, which will allow us to come up with novel systems that embody the security practices (and in some cases workarounds) and facilitate the "data labour" of such originations.



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**3. Online harms:** One area where we had not considered as central to issues of positive security and its relation to domestic violence was the significance of online harms such as cyberbullying, stalking and abuse by perpetrators using mobile technology and social networks. While staff reported this had been on the increase, they felt these particular forms of abuse had been exacerbated by the pandemic. This was an area of increased concern for staff as they did not feel they had the tools or resources to support women or report this to relevant authorities where significant action could be taken. Further to this staff also reported having to outline the risks associated with sharing locations and information on social media to women survivors as they could share details about themselves that could be used for further abuse. While social media tools during lockdown were reported as being vital for closed-group discussions and announcements, staff reported how many women also needed support and training in managing their online social media presence and ensuring friends and family did not disclose anything unwittingly on their behalf. This is particularly of interest to notions of community security outlined in our insights, which is less governed by formal organisational procedures but on ways in which women might struggle to navigate security issues when focussed on connecting with others for support or friendship. The interplay between already existing (and normative) harms to these victims and the emergence of new harms and vulnerabilities stemming from the use of social media and information shared online, further complicates the work of organisations such as Angelou and UWAH. Alongside more recent attempts (also from the UK government) to map out online harms, we believe it is important (especially for such contexts) to further explore this interplay between offline and online harms in order to design the processes and technologies that can protect women and prevent such complex and multi-dimensional harms to emerge.

**4. Drawing comparisons:** Our original intention had been to draw comparisons between two organisations that supported women experiencing domestic violence. However, with the changes in organisations from Melissa to UWAH this was not as straightforward. This was because the Angelou Centre and UWAH have different priorities for how they support women's needs. For example, the Angelou Centre has a specific orientation that focuses on intersectional and holistic approaches to women's care, some of which involves building solidarity between women survivors, but also advocacy work in communicating data to government departments and working with social services, the judicial and immigration system in the UK. UWAH on the other hand focuses much more on the psychological impacts of domestic violence and counselling services with fewer connections to social services and the police. Furthermore, UWAH did not rely on as many digital tools and services to collect, store or share data on women's experiences. It was therefore difficult to draw meaningful comparisons across these two sites. We still believe that undertaking work across such organisations, even though challenging, (as building trust and rapport requires time, commitment and care) it is important to understand the wider range of challenges that such organisations face, while also developing a better understanding of their practices. This can enable us to design socio-technical systems that respond to such unique challenges and allow us to scale such responses further.

#### Further Information

If you have any further questions regarding this form, please contact [notequal@ncl.ac.uk](mailto:notequal@ncl.ac.uk)

