



Public perceptions of DWP's uses of data for identity verification

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1. INTRODUCTION

[Living With Data](#) is a research project funded by The Nuffield Foundation, which aims to understand people's perceptions of how data about them is collected, analysed, shared and used, and how these processes could be improved. We use the term 'data uses' as a short and accessible way of talking to people about these processes. The data at the centre of such processes is often personal data, defined as data 'related to an identified or identifiable person' by the General Data Protection Regulation (or GDPR, European Union regulation about data usage and rights).

On Living With Data, we produced accounts and visualisations of specific 'data uses' which we presented to and discussed with research participants in surveys (n = 2000 x 2), and in focus groups and interviews (n = 112).

We selected cases from public sector organisations because their data systems increasingly shape everyday life experiences, and yet they had received less attention than high profile commercial systems at the time of our research. We identified welfare, public service media and health as three domains on which to focus our research because they are core aspects of everyday life.

This document summarises what we found about people's perceptions of the UK government Department for Work and Pensions (DWP)'s uses of data for identity verification. An overarching project report and reports on other sectors can be found in the Resources section of the Living With Data website, along with other publications from the project.

2. CASE STUDIES OF DWP DATA USES

To produce accounts of uses of data in the welfare sector, we partnered with DWP. The example data uses were selected by our DWP contacts, and accounts were produced iteratively with partners. DWP data uses focused on ways of making it possible to verify identity online. The first was Confirm Your Identity, an identity verification process for Universal Credit payments. The second, Dynamic Trust Hub, was exploring a range of issues relating to identity verification, including attribute-based approaches, technology integration and possible security checks.

Alongside other general questions, we presented a textual description of one of these, Confirm Your Identity, to 1/3 of our survey respondents; the other 2/3 saw other public sector data uses. As the survey was completed by 2000 respondents on the two occasions we administered it, this means around 1300 of them answered questions about Confirm Your Identity.

We ran the survey twice to explore change over time, and specifically to investigate whether the different phases of the Covid-19 pandemic affected attitudes to data uses.

In response to the vast majority of questions that we asked, we found no statistically significant difference between figures from the first and second waves of the survey. Therefore, in this report, estimates of the proportions of people holding particular opinions refer to the 2020 survey. Where we did find differences between 2020 and 2021, we highlight these.

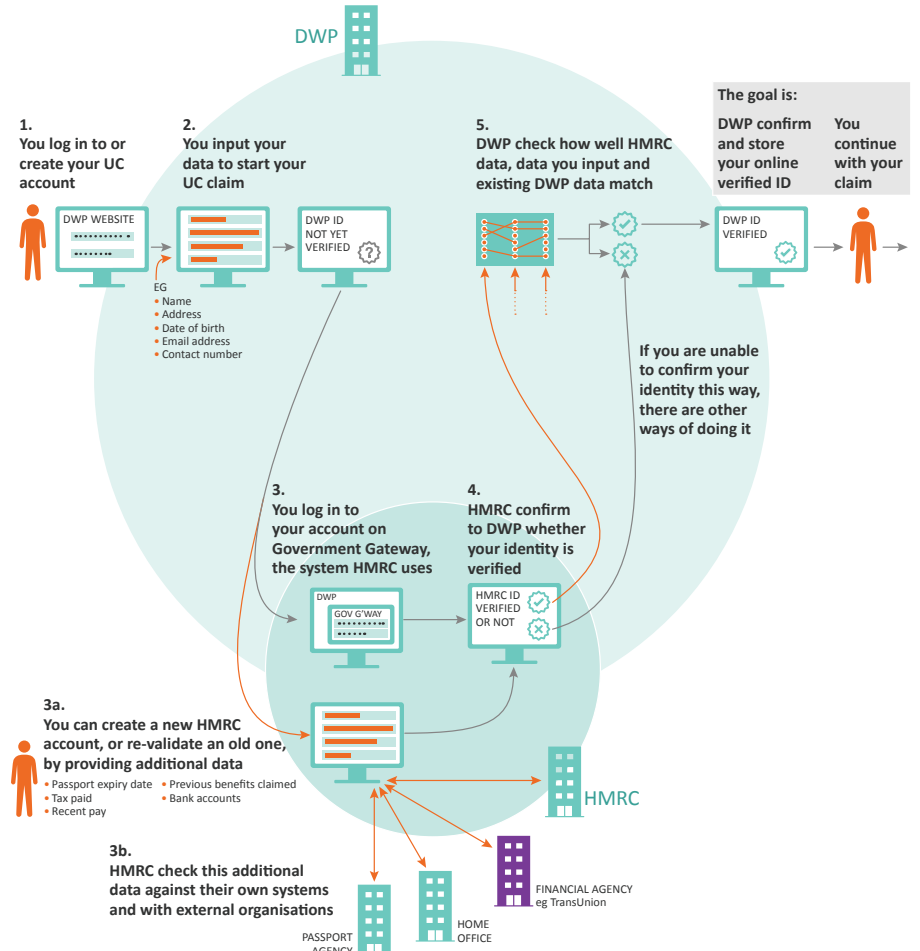
We presented visualisations and verbal descriptions of DWP data uses to participants in our focus groups and interviews, which ran from November 2020 to September 2021. Figure 1 shows small versions of the visualisations we shared with focus group and interview participants. Full-size visualisations of data uses can also be found on the Data Uses page of our website. Descriptions can be found later in this report.

Figure 1: visualisations of DWP uses of data for identity verification that we discussed in our research

DWP Confirm Your Identity

When you claim Universal Credit (UC) online DWP needs to check you are who you say you are before you can continue with your claim

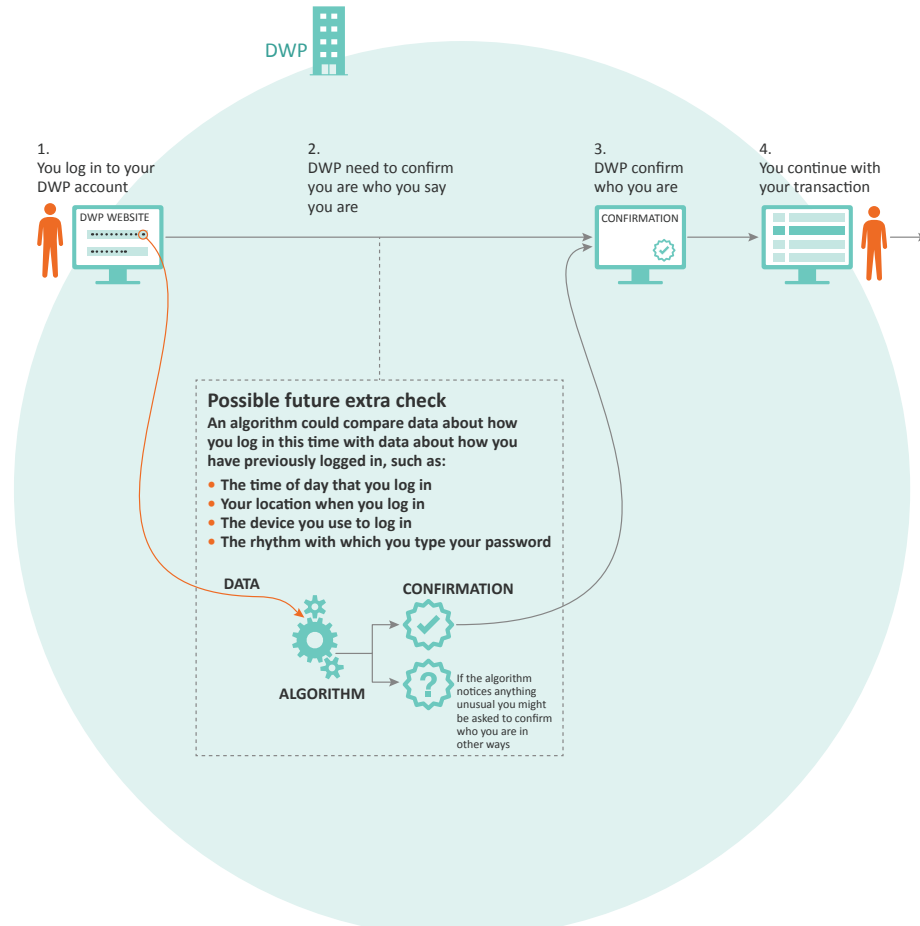
All the processes shown here are secure and automated



DWP Dynamic Trust Hub

It is increasingly possible to interact with DWP online. If you do this, the DWP needs to confirm you are who you say you are. As part of a larger project, it is considering a range of security checks that it could use to support this process.

All the processes shown here are secure and automated



For the interviews and focus groups, we grouped data uses into four themes: Data Matching; Data Ownership and Control; Data Sharing and Re-use; Algorithmic Processing. We discussed one theme in each focus group or interview, which means that each theme was discussed by approximately 1/4 of our participants. The themes that included welfare data uses were:

- **Data Matching:** this is where organisations match data from different datasets or databases, or compare data from one dataset with data from another. The Data Matching theme included a health case study and Confirm Your Identity.

- **Algorithmic Processing:** this theme focused on analytic processes where machines make predictions which can lead to recommendations to human operators or automated decisions. It included two public service media case studies and DWP Dynamic Trust Hub.

Visualisations of these themes can be found on the [Producing accounts of data uses](#) page of our website.

3. PUBLIC PERCEPTIONS OF DWP'S USES OF DATA: WHAT WE FOUND

3.1. The importance of the DWP / welfare context

In the survey, we asked respondents about whether they trusted different sectors and institutions, including DWP, to: a) keep their data safe, b) gather and analyse data about them in responsible ways, and c) be open and transparent about what they do with data. We did this in order to gauge whether trust varies across institutions or across data uses. In other words, we explored whether trust in organisations and sectors in general influences attitudes to those same organisations' or sectors' data uses. Overall responses can be seen in Figure 3.

As can be seen in Figure 3, levels of trust were consistent across the three data uses that we asked about (keeping data safe, gathering and analysing data in responsible ways, and being open and transparent about what is done with data) across all sectors and institutions. This consistency in degrees of trust across the three data processes suggests that respondents' trust in sectors or institutions influences their trust in the same sectors' or institutions' data processes. In other words, sectoral or organisational context is an important factor when it comes to attitudes to data uses.

We found reasonably high levels of trust in the DWP in response to these questions. In 2020, it was ranked 4th out of 11, although it should be noted that 'a moderate amount' of trust was a significantly more common answer than 'a great deal' of trust. By 2021, the DWP was ranked 3rd – this reflects a decrease in trust in the police rather than an increase in trust in the DWP. We also found differences between groups (statistically significant at the 95% level). In 2020, older people were more trusting of the DWP: 61% trust the DWP to keep their data safe, compared with 45% of the youngest group. Higher-paid respondents were also more trusting of the DWP (60%) compared to the lowest-paid group (50%). People claiming Universal Credit had more trust in the DWP to use data openly, responsibly and safely than people not claiming Universal Credit: with openness as a comparison, 55% compared with 49%. LGBTQ+ people were less likely to trust the DWP than heterosexual cisgender respondents (16% compared to 19%).

Some of the responses in free text fields in the survey contradicted this picture of relatively high levels of trust. Respondents expressed distrust in the DWP and in the government, for example 'I wouldn't trust the DWP to keep ANY of my data safe, and I wouldn't trust them not to abuse it' and 'I don't trust this government whatsoever with my data.'

Also the DWP is notoriously horrible for how it treats people’. A similar picture emerged from our focus groups and interviews. For example, Astrid participated in an interview about the Data Matching Theme, which included DWP Confirm Your Identity and a NHS project relating to antibiotic research.

Astrid is non-binary, lesbian/gay, aged 35-44, from an ‘other white’ background. Asked how she felt about data matching in both of these data uses, she said:

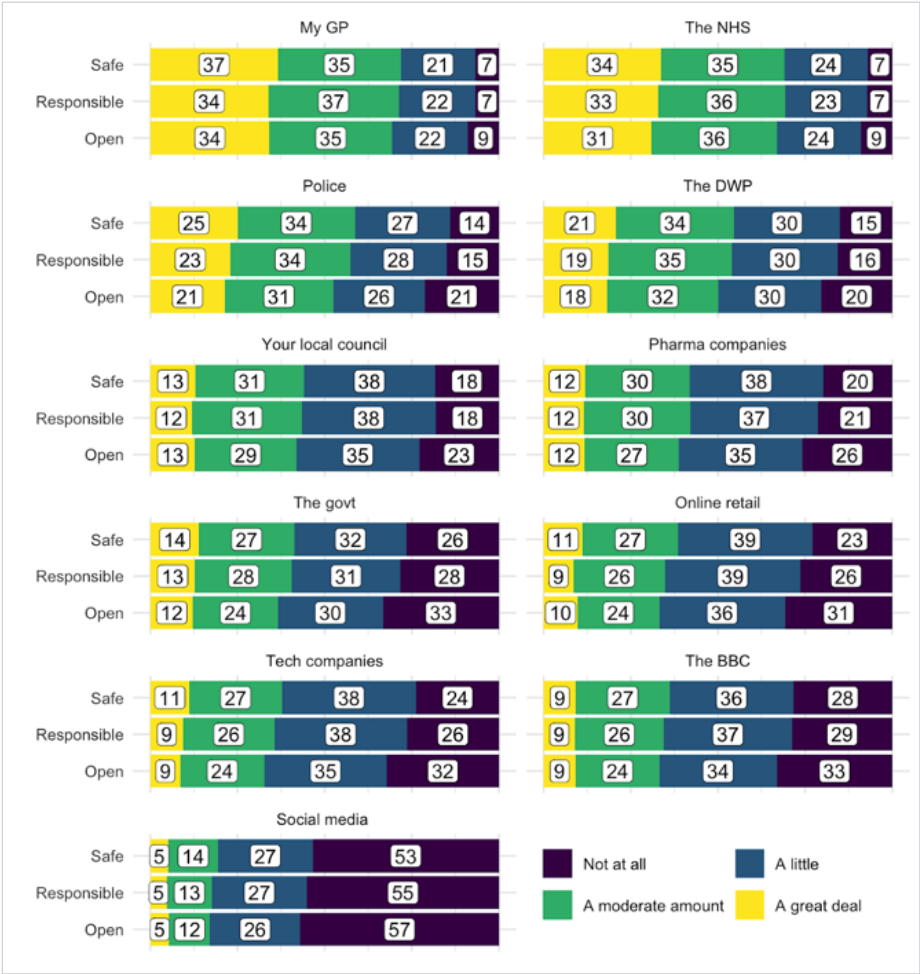
“Well, I think, at the individual level, there is the matter or the question of trust [...] I think you could rephrase it as how trustworthy do you think these institutions are, and also what is the purpose of, you know, collecting, verifying data.

So, in one case, we’re talking about a research project developed in response to the public health crisis around the overuse of antibiotics, right? And on the other hand, we’re looking at the agency of the state, who is trying to minimise its expenses, outgoings in terms of paying out benefits, and trying to potentially catch out fraudulent claimants and stuff like that.

So, I do think that that larger context does play a role.

Astrid

Figure 3: How much do you trust <organisation> to: keep data about you safe?; gather and analyse data about you in responsible ways?; be open and transparent about what they do with data about you?



Similarly, in a focus group about the same theme, four women with long-term conditions and low incomes agreed that they trusted the NHS and did not mind it using their data, whereas they declared their distrust of DWP and its data uses. Patricia, a white, British, heterosexual woman who was born in the UK, aged 55-64, has a long-term condition, an annual household income £10,000-£19,000. She said that using DWP Confirm Your Identity sounded like ‘virtually selling your soul,’ claiming that: ‘They [DWP] want everything about you, every minute little detail’.

In the section of the survey about data uses in specific public sector contexts, DWP Confirm Your Identity was presented to approximately 1/3 of respondents. The other 2/3 saw the other specific public sector data uses that we researched. Respondents were asked to respond to a series of statements which explained the various steps and processes involved in Confirm Your Identity, reproduced in Figure 4.

Responses were recorded on a slider, where at one end the option was ‘Not at all comfortable’ and at the other end ‘Very comfortable’. The distribution of responses to these statements is shown in Figure 5.

Figure 4: description of Confirm Your Identity data use from the survey

Confirm Your Identity

1. The Department for Work and Pensions (DWP) is the government department responsible for welfare, pensions, child maintenance and related policy. If someone needs to claim Universal Credit (a payment to help with living costs for people on low incomes), the DWP needs to confirm that the claimant is who they claim to be – this is known as confirming identity. Currently, most people take documents like a passport or driving licence to a Job Centre to prove who they are. DWP is working on ways to make it possible to confirm identity online.
2. Imagine you are claiming Universal Credit from the DWP and you already have an online identity created by HMRC (the government department responsible for taxes and other financial matters) from a previous transaction with them. The DWP gives you the option to use an automated, secure system to get confirmation from HMRC that you have already proven your identity with HMRC. To do this you will need to login into your HMRC account when making your online Universal Credit claim and HMRC will check its records and send an automated confirmation back to the DWP. This way, you don't need to prove your identity again with the DWP.
3. If you do not already have an online identity, you are offered the option to create one via HMRC using documents that you might have at home, such as your passport and P60 (a record of a person's income and tax for the previous year). This means that you may not have to go to visit the Job Centre in person. To use this option, you need to input your passport number and the amount of money you were paid in the previous tax year into a secure online system. HMRC will then do an automated check with the Passport Office and its own systems, and let DWP know if they are able to confirm your identity.
4. If you do not have a passport or P60, you can choose to input information from other financial documents such as bank statements into HMRC's secure system in order to create an online identity. HMRC will then do a one-off, secure identity check with a financial agency such as TransUnion, as these hold records for most people.
5. The project described here is intended to make processes easy and usable by more people than existing government identity checking systems which require people to have a passport, P60 or to have registered with HMRC.
6. Some groups say that the identity checks described here exclude some people, such as those without credit histories, with unusual residences or residence histories, or otherwise complicated lives. This means that such people might be under more scrutiny and this might delay their access to Universal Credit.
7. Once you have a verified online identity, you will have a password to be able to log into your account. In order to make access to this account more secure, the DWP are exploring a number of ideas for extra checks. If you didn't pass these checks, you would need to complete further checks (such as inputting the last four digits of your bank account number). These checks are:
 - whether the time you log in is similar to your usual log in time
 - whether the rhythm that you type your password is the same as your usual rhythm
 - whether you swiped on your phone in the same pattern as you normally swipe it
 - whether you are using the same device that you have used for previous interactions with the system.

In 2020, respondents were largely comfortable with Confirm Your Identity. Around 1 in 4 of the respondents who saw Confirm Your Identity and commented in free text fields indicated that this is principally because of convenience. A small number of respondents with physical disabilities felt that Confirm Your Identity made identity verification more accessible to them – as one of them said, 'it is much easier to do this online as I have mobility problems'. For other respondents with different disabilities, online identity verification was challenging. One said 'I am disabled and cannot use online forms very well'.

By 2021, there was a small increase in how comfortable people were with different aspects of it. Here, the context of the Covid-19 pandemic was important. In 2020, a small number highlighted that Covid-19 meant they were more inclined to use online services in order to 'stay safe'.

In 2021, a larger number of respondents specifically mentioned Covid-19 as a reason for using online identity verification. For example, 'I would do it online because of Covid' and 'online means not having to be in contact with strangers and the consequent risk of Covid'.

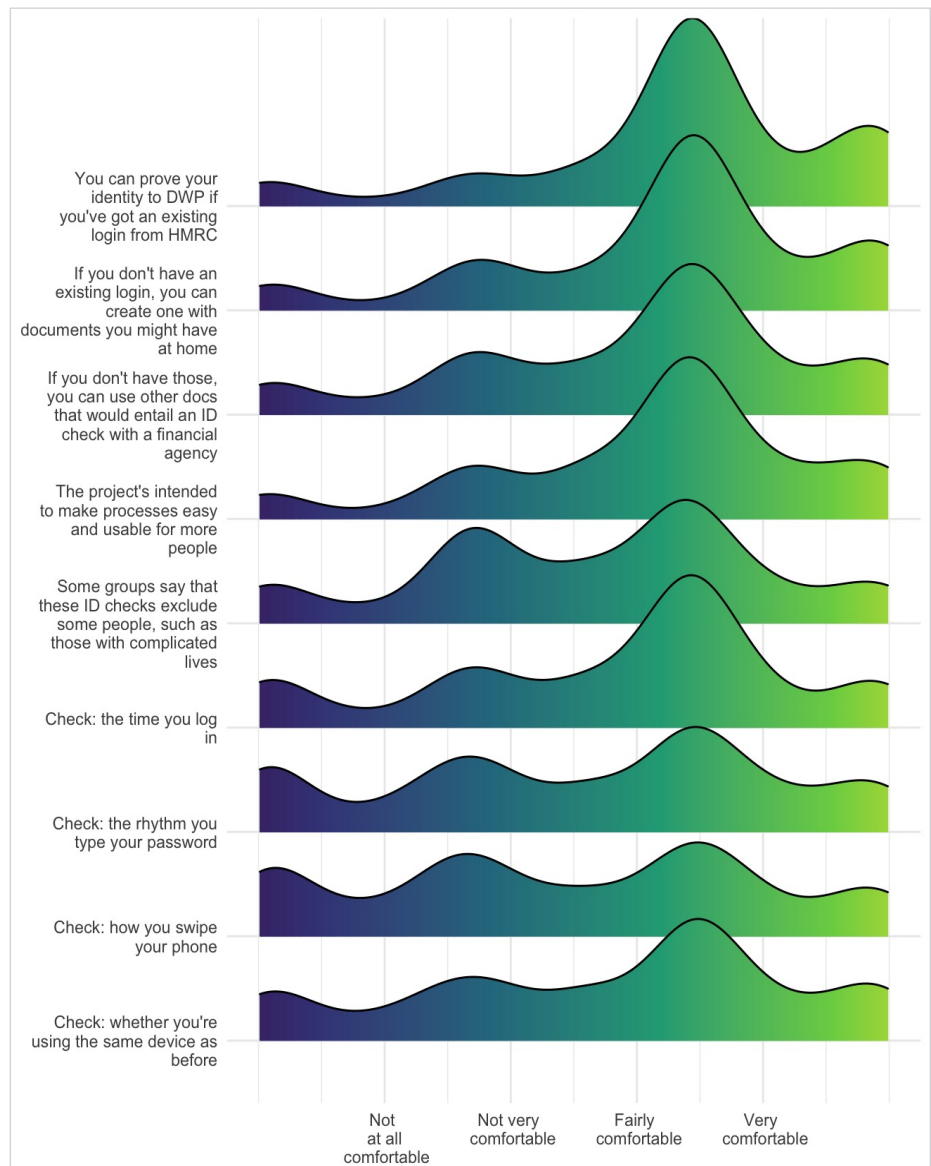
In the interviews and focus groups, ideas about what makes a data use fair informed some respondents' perceptions of data uses in the welfare context. One defining characteristic of fairness for participants was having a choice, both to share data once you understand how it will be used and what happens to your data once it has been shared.

Participants felt that engaging with the public service media data uses we discussed with them, both of which were experiments with personal control over data, was a choice: people could opt to use these systems, or not. They felt that there was less choice about whether to engage with the DWP examples, because the welfare and pension support that DWP provides is essential to its users. As a result, DWP data-based systems which were not accessible to all were seen as unfair.

Unlike survey respondents, focus group and interview participants were concerned about welfare data uses because of how they defined fair data uses.

For example, in an interview about data matching, Grace, a white, British, bisexual woman, aged 35-44, a teacher with an annual household income of £50,000-£69,000, said that Confirm Your Identity was unfair because 'not everyone can access it'. At the same time, she also recognised that other approaches to identity verification may also be inaccessible to certain groups:

Figure 5: Survey responses to statements about DWP Confirm Your Identity



“

Now that I've thought about certain people and certain, you know, groups of people that wouldn't be able to use that data matching system, there's definitely some unfairness with the DWP one. I just don't know if another system would be fairer or if it is a system that would suit everyone, really. [...] I do understand that you can't just give Universal Credit to anyone with no proof of identity. It's maybe just inherently unfair. *Grace*

Kahina is a black, heterosexual woman born in Somalia, aged 25-34, with an annual household income of £30,000-£39,000 and no long-term health conditions, who participated in a focus group discussion about algorithmic processing. Kahina compared the public service media examples with the DWP Dynamic Trust Hub in terms of choice, in order to evaluate their fairness. With the public service media examples, people 'have got a bit of a choice' with regard to completing a profile or downloading the app, she said.

Because engagement with the DWP practice ‘is a need’ for many people, and the potential security checks will not be optional, there is less choice, which, in Kahina’s eyes, makes the practice more unfair.

Ahmed is a Pakistani heterosexual man who was born in the UK, aged 25-34, unemployed and looking for work, with an annual income of £9,999 or less and no long-term conditions. After a conversation about various aspects of DWP Confirm Your Identity in an interview about the Data Matching theme, he said that fairness involves clear information, transparency, data being used for the social good and the ability to consent:



It’s where people are kept well informed and data is used for a valuable or useful purpose, and there’s a transparent process as well for sharing the data. And obviously permissions are sought too. *Ahmed*

3.2. Concern about people from disadvantaged and minority groups being negatively impacted by data uses

We found widespread concern about the potential for DWP data uses to have negative consequences for people from disadvantaged and minority groups. In the survey we found that aspects of Confirm Your Identity that might reinforce inequalities concerned respondents.

As seen in Figure 5, respondents were least comfortable with the statement that there is concern that some groups of people might not be able to use such a system, might be put under more scrutiny, or have their access to Universal Credit delayed by the introduction of online identity verification. This is also a problem with non-digital, face-to-face or paper-based identity verification systems, which, as the free text field quotes in the previous section indicate, can also be difficult to use for some groups.

In the focus groups and interviews, without explicitly using the term, a lot of participants appeared to be aware that data uses can reinforce inequalities, and that some data uses are more likely than others to deepen inequalities.

Belonging to a disadvantaged or minority group appeared to inform participants’ perceptions of data uses and what they said about them. We are not suggesting that there is a direct correlation between belonging to a demographic group and attitudes to data uses.

Our point is that demographic characteristics shape life experiences and in turn, those experiences shape perceptions of data uses. It is also important to note that a number of participants who didn’t belong to a disadvantaged or minority group were still concerned about how these groups might be more negatively impacted by data uses.

Often, participants from one disadvantaged or minority group were concerned about the effects of data uses on another disadvantaged or minority group.

Participants were more concerned about these issues in the welfare context than in public service media and health. Data-driven discrimination was particularly concerning in this context because people who are disadvantaged by structural inequalities often depend on welfare services. Many participants expressed concern about whether Confirm Your Identity and Dynamic Trust Hub were equally accessible to all DWP service users.

Tanya is a white, British lesbian woman, aged 55-64, a public sector worker with an annual household income of £30,000-£39,000 and a long-term health condition. She felt that data uses which were not equally accessible to all were unfair. Tanya felt that DWP Confirm Your Identity was not ‘completely fair and all inclusive for all communities.’ She explained:



People don’t have access to technology in the first place and, you know, what about people with English as an additional language or no English, or families with additional needs where using technology might be difficult or they aren’t literate. *Tanya*

Figure 6: description of Dynamic Trust Hub data use from the focus groups and interviews

Dynamic Trust Hub

Here is an illustration of part of a project at the DWP, the government department responsible for welfare, pensions, child maintenance and related policy. The project is called Dynamic Trust Hub. To enable people to interact with DWP online so they no longer need to go to a Job Centre which can be difficult to do due to working hours, illness or mobility, the DWP needs to confirm that people are who they claim to be – this is known as verifying identity. Dynamic Trust Hub is exploring and implementing different ways of verifying identity.

As part of Dynamic Trust Hub, DWP are considering doing extra checks behind the scenes when someone types in their password to access their DWP online account. The aim is to add an extra layer of information security to the identity verification process. It is important to note that this is not actually happening and that similar techniques are used by other organisations.

These extra checks include whether the time you log in is similar to your usual log in time, whether the rhythm that

you type your password is the same as your usual rhythm, whether you swiped on your phone in the same pattern as you normally swipe it and whether you are using the same device that you have used for previous interactions with the system.

The extra checks that DWP is considering involves using algorithmic processing to contribute to verifying identity. With the DWP example, algorithmic processing aims to add an extra layer of information security to your online DWP account.

Potential benefits of Dynamic Trust Hub: people don't need to confirm identity in person/with paper documents, and extra layer of security to the identity verification process.

Concerns about Dynamic Trust Hub: requires people to have HMRC account, passport, bank account, financial record, so excludes people with complex lives and negative consequences for people whose identities can't be verified; inaccuracies, eg people may not own their own devices, move around geographically or otherwise have unstable lives and this would be taken as a proxy for unverifiable identity.

In a focus group conversation about data matching, which covered the DWP Confirm Your Identity and an NHS antibiotic prescribing research project, queer couple Heidi and Kerry, thought that the DWP Confirm Your Identity data use was unfair. For Kerry, a white, British woman, aged 35-44, a public sector consultant with an annual household income £70,000-£99,000 and no long-term conditions, the welfare context of this data use was significant, because already vulnerable people are dependent on welfare for their survival. Kerry said:

“

It's so much about somebody's individual basic needs, it feels like, that [...] the potential detriment to someone who's vulnerable is too great for me to consider that a fair process. There must be something better. There must be a way to get what we need in a more proportionate way, meet that person's need as it arises, without going down the rabbit hole of other stuff. *Kerry*

There were many other comments like this from our participants. For example, Ruby, a heterosexual, British Chinese woman who was born in the UK, aged 18-24, who works in legal services, has an annual household income of £40,000-49,000 and no long-term conditions, participated in a focus group about the Data Matching theme. Talking about the documentation needed to verify identity through the DWP Confirm Your Identity system, she said:

“

Those people that don't have a P60, is it more people that have jobs that are cash in hand, for example, and people that don't have a passport, would they, you know, have never left the country or never needed a passport. That makes me think of people that may be [...] if you've never been abroad and have a cash in hand kind of job, that makes me think the people that are closer to the poverty line have to part with their data more than people that have like a P60, passport, like you said, and that's really unfair. *Ruby*

Here, Ruby appears to believe that people without the right kinds of records to be able to verify their identity online would have to ‘part with their data more’ than people who have such records. Whilst this is not accurate, and we say more about misunderstandings below, Ruby notes that already disadvantaged groups may be less able to engage with Confirm Your Identity than others.

In the survey, we found less comfort with the possible extra security checks being considered in Dynamic Trust Hub, and these were also a concern for some focus group and interview participants. These checks were described as Orwellian, Big Brother Watch and spying in the free text fields.

The check with which survey respondents were least comfortable was checking whether people logging into accounts swipe their phones in the same pattern as they normally swipe it. While most groups had similar attitudes towards these questions, whether people were claiming Universal Credit made a difference.

People claiming/in receipt Universal Credit felt significantly more comfortable about additional automated checks than other respondents, although they were not as positive about potential additional checks as they were about the other statements.

In free text fields in the survey and in focus groups and interviews, we saw that concerns about these checks were linked to concerns about people from disadvantaged and minority groups being negatively impacted. For example, one free text field comment said:



I have had to do this for my daughter who is disabled, as she had a passport I was comfortable using that, but I would not be comfortable being monitored via my own keyboard actions to verify who I am, particularly when sometimes she is able to do things herself and other times I have to do them for her, this wouldn't be consistent usage.

Huso, a black, British African, heterosexual woman, who was aged 25-34 and worked as a teacher, had similar concerns about people with limited financial resources who lived in her community accessed the internet at the library, which she felt would make undertaking Dynamic Trust Hub security checks difficult:



Who wants to be filling out security checks in a public library, where they can see what you're doing on the computer, because the computers are placed so that everyone can see what you're doing on the computer? You don't want everyone seeing all that information about you. But if that's the only place you have to actually use a computer, [...] that's really bad. *Huso*

3.3. Concern and confusion about commercial company involvement in the provision of public sector data systems

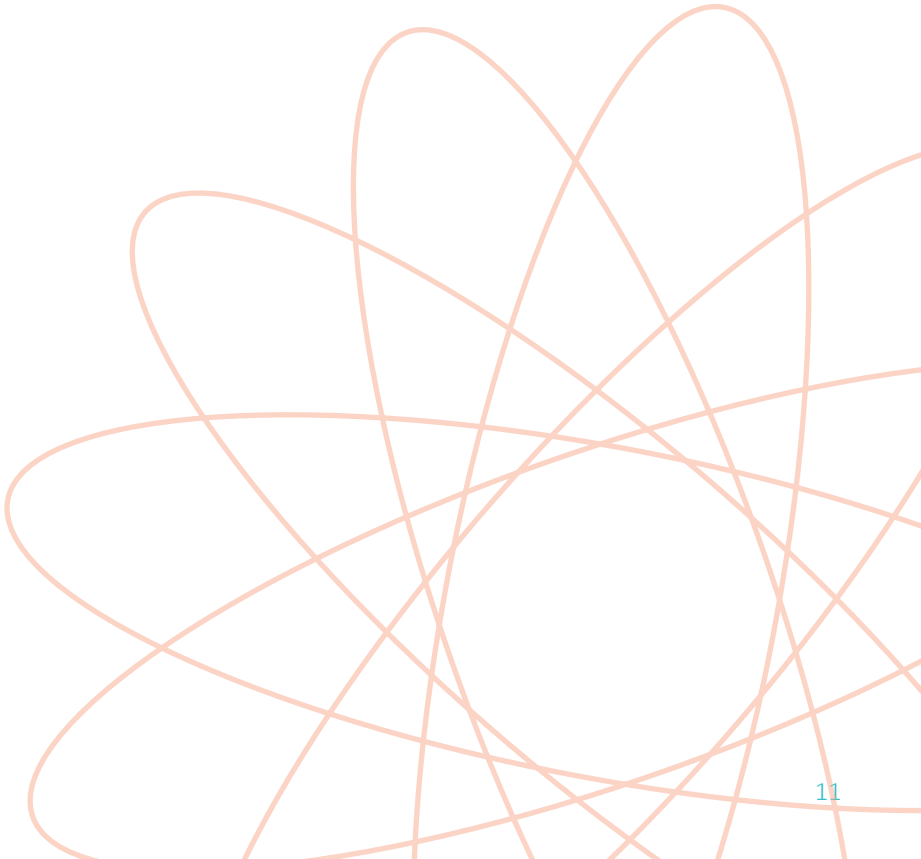
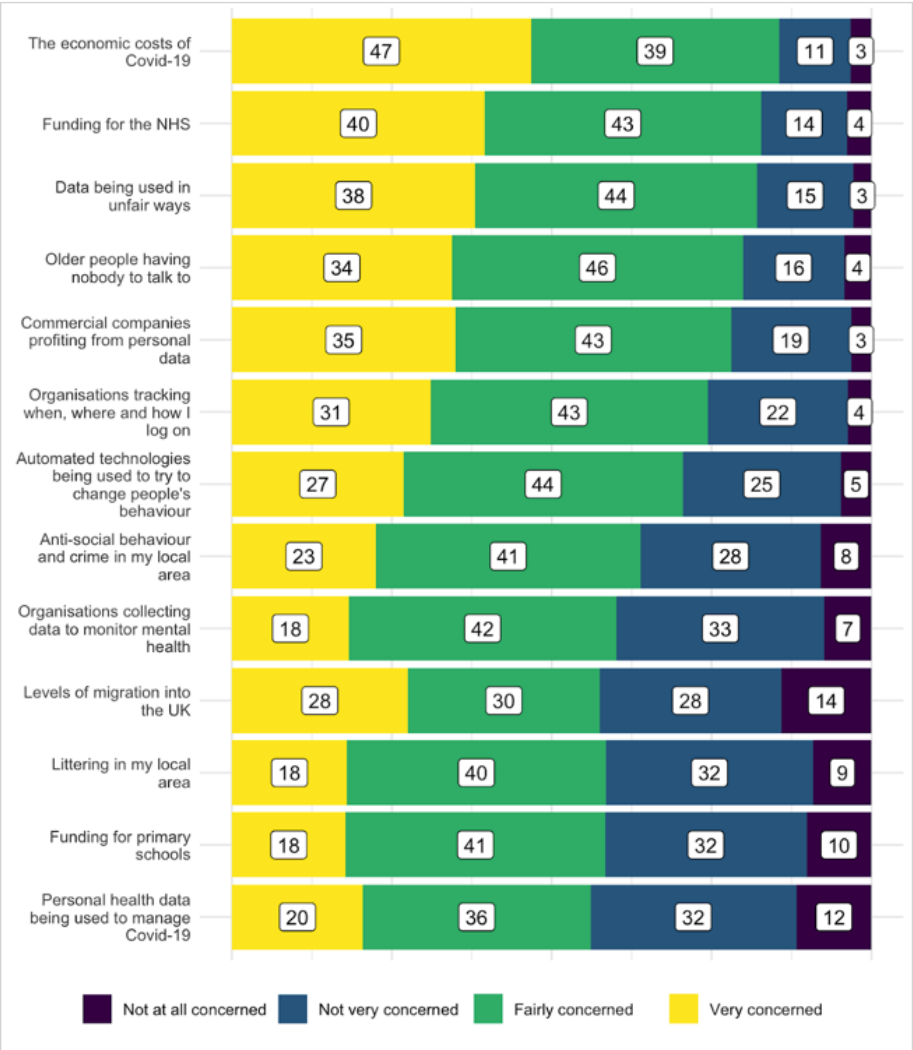
In a section of the survey which aimed to gauge respondents' general attitudes to data uses, we presented them with ten statements and asked them to indicate how much they agreed or disagreed with each one. Here we found 67% of respondents agreed or strongly agreed with the statement 'It concerns me if commercial companies are involved in providing public services such as health and welfare'. Disabled people were more concerned about commercial companies providing public services than people who are not disabled (70% compared to 65% respectively).

Elsewhere in the survey, to understand how concerns about data uses compare with other concerns, we asked respondents how concerned they were about two lists of issues, one broad issue (e.g. the economy, pandemic diseases and immigration) and the second more narrow. In the second list, commercial companies profiting from personal data was ranked the 5th biggest concern of 13 issues, with the economic costs of Covid-19, funding for the NHS, data being used in unfair ways and older people having no-one to talk to ranking above this issue, as seen in Figure 7. People in receipt of Universal Credit were more concerned than other groups (27% compared to 18% of people not in receipt). Black (42%) and Asian (38%) people were more concerned than White people (31%), and LGBTQ+ people (39%) were more concerned than heterosexual cisgender people (32%).

Alongside this concern about commercial company involvement in the provision of public sector data systems, we also found confusion about the nature of their involvement. Understanding how data about us is collected, analysed, shared and used can be difficult, because data uses are complex, explanations can be long and hard to follow, often by design, and sometimes they are not available at all. The involvement of third parties can compound these challenges. During our research, there were moments when our participants appeared not to understand fully the data uses we discussed with them, especially when third parties or commercial companies were involved.

Above, we saw Ruby believe that people without the right kinds of records to be able to verify their identity online would have to ‘part with their data more’ than people who have such records. She went on to say ‘I’m still kind of hung up on the whole financial agency getting your information. This suggests that she thought that data would be transferred from one organisation to another as part of this process, which is not the case. Rather, data held by one organisation is checked, anonymously, against data held in another organisation, to verify identity. But such third party involvement in public sector data processes is hard to understand, not just in the welfare sector. This meant that Confirm Your Identity was confusing for some, because it involved matching data held by different organisations.

Figure 7: In general in your daily life, how concerned are you about each of the following?



4. CONCLUSIONS

Data-driven systems like Confirm Your Identity have their benefits – this is why they are introduced, of course. They are convenient, they feel safer during a pandemic, and they make processes easier for people with certain disabilities. However, people are also concerned about systems like these. In the context of welfare, they are especially concerned about aspects of data uses which might reinforce inequalities, because the people who are disadvantaged by structural inequalities also often depend on welfare services and have no choice about engaging with welfare systems.

Other concerns related to the involvement of commercial organisations in public sector (data) systems and commercial companies profiting from personal data. As commercial companies are often involved in providing the technical infrastructure or processing capacity for public sector data-driven systems, concern about their involvement in or profit from public sector data systems should be taken into account by welfare services setting up such systems. Welfare service providers should be especially concerned about the fact that disabled people are more concerned than people who are not disabled, because they are at high risk of poverty and therefore likely to be welfare service users. Public-private partnership in the provision of data-driven systems and related infrastructure sometimes confuses people. This could be because such partnerships are complex or because they are not explained well.

The broad context of welfare and the narrower context of the DWP influence perceptions of data uses. Although trust in DWP was relatively high amongst survey respondents in both waves, there was also a lot of criticism of DWP in both the survey and the focus groups and interviews. Thus we conclude that people can have moderate trust in an organisation whilst also being critical of it. In this context, security checks like those being considered

on Dynamic Trust Hub can seem Orwellian, or surveillant. As a result, their purpose or benefit can be overlooked.

To address these issues, welfare service providers like DWP could:

- Think carefully about third party or commercial company involvement in the provision of data-driven services.
- Provide clear information about third party or commercial company involvement in the provision of data-driven services.
- Provide clear information about potential harms for disadvantaged or minority groups when communicating about data uses, because this concerns people.
- Provide clear information about potential benefits, so that the purpose of data uses is clear.
- Provide clear information about how new approaches (like Confirm Your Identity) compare with previous or existing approaches and whether these are still available.
- Use visuals to communicate data uses and ensure explanations can be easily translated to other languages. These simple steps could significantly improve people's understanding of data uses.
- Build choice into data processes, for example about what data is collected and what happens to collected data.
- Support or commission further research into the specific aspects of commercial company involvement in public sector data systems that are concerning and confusing, how to communicate complex public-private partnerships, and whether visualisations, of the kind we used and participants appreciated, can help to communicate complexity and overcome confusion.