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Algorithmic Surveillance in the UK Welfare System: The Case of Universal Credit and the Rise of Digital Conditionality

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ABSTRACT

This paper examines the proliferation of algorithmic surveillance within the UK welfare state and employs the implementation of Universal Credit (UC) as an exemplar of digital welfare provision. Combining qualitative policy analysis with current, up-to-date research (2016–2025) it analyses how automation, digital conditionality, and digitally-monitored practices impact the daily lives of claimants and the practices of the welfare services. It applies theory from surveillance studies and algorithmic governance literature to demonstrate the increasing regulation of welfare eligibility, conditionality and behaviour by the digital infrastructures that underpin modern welfare services. It finds that Universal Credit further extends conditionality through constant digital monitoring, automated anti-fraud measures and the creation of data-driven assessments of the capacity of claimants to engage with welfare, disproportionately affecting marginalised claimants and the digitally excluded. This paper argues that these systems may reduce professional judgement, increase bureaucratic burdens and expand state capacity for surveillance under the logic of efficiency and modernization. In turn it provides new theoretical insights into digital welfare governance by conceptualizing Universal Credit as a holistic system of algorithmic governance restructuring relations of power between the institution and the claimant.

1. Introduction

As a result of introducing the Universal Credit (UC), which has succeeded in unifying six separate welfare systems into one digitised program, the welfare structure of the United Kingdom has been subject to restructuring. Universal Credit has been presented as an innovative welfare reform in terms of the social security system of contemporary Britain even though it aims to simplify processes of managing welfare systems, create more labour market incentives, and avoid fragmentation (Millar & Bennett, 2017; Wright et al., 2020; Dwyer et al., 2020). Nevertheless, while the new system seems to offer a number of managerial benefits, recent studies show that UC is not only a way to manage the welfare system more efficiently but also a more radical approach to welfare governance through digitalisation, automation, and surveillance (Halliday et al., 2024; Bennett et al., 2025; Cheetham et al., 2019).

This points towards understanding Universal Credit not merely as an income support provision but a 'digitally driven' welfare system in which accessing and maintaining the eligibility for benefits is made 'contingent' upon sustained on-line interaction, automated assessment and validation of information (Schou & Hjelholt, 2019; Alston, 2019). This has also been described as 'digital conditionality' and is understood as 'an ongoing interplay between claimants and digital infrastructure that governs welfare entitlement' (Bouwmeester, 2025; Morrison, 2025; Dencik et al., 2018), requiring the continuation of 'digital visibility' by ensuring that the applicant has logged their job search activity and communicated any changes in income and a range of other, platform-driven conditions of automated welfare systems.

This development reflects a broader international trend toward data-driven welfare administration whereby states go through digitalisation processes related to data infrastructure and algorithms (van der Veen & Yerkes, 2023; Brodkin, 2021; Høybye-Mortensen & Ejrnæs, 2020). More specifically, welfare administrations get more dependent on digital infrastructure, which includes elements of data analysis and algorithms (Henman, 2022; Eubanks, 2021). Although policymakers frequently present these systems as efficient administrative tools for preventing fraud and improving the targeting of resources, critical research has pointed to issues related to surveillance and the maintenance of social inequalities by these measures (Eubanks, 2021; Dencik et al., 2018; O'Neil, 2016).

While this field is expanding, three main shortcomings have emerged. First, the majority of research tends to focus on UC as an aspect of activation policy and an example of welfare administration reforms without sufficient emphasis on surveillance in digital governance (Bennett et al., 2025). Although several studies about poverty and suffering regarding UC programs and welfare administrations' burdens (Cheetham et al., 2019; Wright et al., 2020) were already made, algorithmic surveillance has not received enough attention.

Second, although interdisciplinary studies of algorithms and digitalisation as a form of governing became quite popular recently (Kitchin, 2017; Beer, 2017; Ananny & Crawford, 2018), they still lack integration into the framework of social policy and social work research. This fact limits the ability of researchers to come up with coherent theories about the relation

between algorithms and welfare policies and professional practices (Keddell, 2023), particularly in light of growing interest in critical data studies.

Third, further empirical research is needed to examine how algorithmic surveillance operates within Universal Credit systems. Policy reports and parliamentary investigations indicate increasing reliance on automated systems for fraud detection and compliance assessment (Department for Work and Pensions, 2023), but there is little attention paid to the impact of these technologies on claimants and welfare professional practices. The contemporary academic discourse asserts that welfare information systems increase bureaucracy and procedural difficulties, particularly for marginalised individuals who cannot use digital technologies (Bennett et al., 2025; Alston, 2019; Cheetham et al., 2019). However, the evidence is insufficient from a theoretical perspective when discussing welfare governance.

While recent scholarly contributions in this field have provided some valuable findings, three major shortcomings are evident. First, scholars tend to interpret systems like Universal Credit from the perspective of administrative reform and labour market reform without considering the governance aspect involving big data. Secondly, studies focusing on algorithmic surveillance, digital conditionality, and administrative burden have been developed separately, which creates a lack of comprehensive understanding of interactions among these factors. Thirdly, predominant frameworks assume a normative or a policy-based approach to analysing digital welfare systems, failing to provide an insight into the way that digital welfare systems reorganise the processes of power, visibility, and decision-making.

Additionally, the potential consequences of digital welfare systems on social work practice require further research. Despite the recognition that professionals find themselves working in environments influenced by algorithms, most researchers treat those changes merely as contexts in which professionals work, neglecting the importance of analysing how digital systems affect practices and outcomes (Keddell, 2023; Eubanks, 2021).

This paper addresses the following research question: How does the algorithmic governance of Universal Credit change the practice of welfare conditionality, surveillance and professional decision-making in the UK welfare system today? This article aims to make three key contributions: first, it conceptualises Universal Credit as an apparatus of algorithmic welfare governance rather than simply another administrative welfare reform; secondly, it develops a holistic analytic framework to link algorithmic surveillance, digital conditionality and automated classification; lastly, drawing on recent empirical and policy literature, it sets out how digital welfare infrastructure reorders power, visibility and administrative control in modern welfare systems.

2. Conceptual Framework

This article demarcates between several connected concepts for analytical purposes. 'Algorithmic governance' means a governance process influenced by automated calculation and data-driven decision systems. 'Algorithmic surveillance' refers to the ongoing monitoring of claimant data in digital systems. 'Digital conditionality' means welfare systems where claims to entitlements are ever more negotiated by digital interfaces, automated reporting systems and digital platforms.

The process of digitisation of welfare systems has created a considerable paradigm shift in how social policy scholars see the interaction between the state and its citizens. In contrast to merely administrative changes, today's welfare systems are increasingly seen as information governance infrastructures, which operate within automation, algorithms, and constant monitoring. In this regard, this paper presents an analytical framework of algorithmic welfare governance to describe the way digital infrastructures reshape the relationships of the UK's welfare system in the light of Universal Credit.

The notion of algorithmic welfare governance can be considered based on contemporary studies in critical data and welfare policies, which stress the active influence that digital infrastructures have on shaping the interactions of the state and citizens. Here, welfare governance ceases to be merely an exercise of professional judgement and becomes a socio-technical practice through which welfare subjects are continuously created and categorised in the course of being monitored through the data system.

Virginia Eubanks shows how automated welfare practices could perpetuate structural inequalities by encoding historicised discrimination into algorithmic processes, hence turning administrative practices into processes capable of intensifying social inequalities instead of eliminating them. Rob Kitchin (2017) similarly claims that algorithms should not be considered politically neutral technical instruments but viewed as politically and institutionally embedded systems producing outcomes of governance through data infrastructures and coded classifications. Brodkin (2021) highlights that contemporary welfare systems are characterised by increasing organisational complexity and managerial governance, which constrains professional discretion and redistributes decision-making authority across institutional arrangements. In this perspective, Rehman (2025) argues that the reconfiguration of firms and welfare institutions is taking place through common technologies of production, focusing on efficiency, standardisation, and control and raising deeper concerns about responsibility, ethics and how society and economy will organise themselves in the future.

On this basis, welfare studies in the contemporary age have developed three analytical frameworks that can help to understand the role played by digital infrastructures in reshaping welfare governance: algorithmic surveillance, digital conditionality, and the digital welfare state (Bennett et al., 2025; Bouwmeester, 2025; Rachovitsa & Johann, 2022). These three concepts are neither sequential nor separate processes but rather a set of reinforcing processes through which welfare systems deploy datafication, behavioural monitoring, and automation in their operation.

Algorithmic surveillance can be defined as the deployment of data-driven technologies for the purposes of monitoring, classifying, and evaluating welfare beneficiaries. Digital conditionality can be conceptualised as the transition from episodic evaluation to perpetual verification of eligibility through digital interaction. The digital welfare state can be seen as the overall institutional change through which welfare delivery is situated within platform-based datafied governance infrastructures.

Discussions about whether these changes indicate a rupture in the field of welfare administration or an evolution of old practices in new technological environments persist in scientific literature. The critical view stresses issues of surveillance, inequality, and control (Eubanks, 2021; Kitchin, 2017), while an alternative view considers the benefits of automation and data integration as tools to increase administrative efficiency, consistency, and to reduce cases of fraud (van der Veen & Yerkes, 2023). The issue requires a mechanism-based approach that will focus on structural changes while avoiding normative binaries.

2.1 Algorithmic Surveillance

The notion of algorithmic surveillance refers to the use of automation mechanisms, data analytics, and machine learning algorithms in monitoring, categorising, and evaluating people to enable administrative decision-making. When talking about welfare contexts, this means technologies that detect welfare fraud, determine welfare eligibility, and evaluate welfare recipients' behaviour. The academic literature on Universal Credit indicates that algorithmic decision-making systems have become increasingly popular in the process of welfare administration and affect decisions made by humans (Halliday et al., 2024).

This is exemplified by automated risk assessment and compliance monitoring systems that identify any discrepancies in the behaviour of the claimants without providing clear justifications for the categorisation process. According to Eubanks (2021), one of the characteristics of algorithmic welfare programs lies in the fact that they will inevitably reinforce discriminatory practices because of the data used for feeding into the machine. In the same vein, Keddell (2023) points out that in the realm of social work, algorithmic decision support tools can undermine professional expertise, as well as conceal the existence of accountability processes.

Contrary to the perspectives outlined above, scholarly materials evaluating welfare surveillance policies propose that using algorithms in welfare administration guarantees procedural fairness, minimises biases and improves fraud detection (van der Veen & Yerkes, 2023). Nevertheless, in light of the latest empirical research, the consensus emerges around the idea that algorithmic surveillance should be perceived as a socio-technical mode of governance, whereby algorithms are seen as mechanisms that change the way in which administration and claimants interact within the welfare system (Bouwmeester, 2025; Rachovitsa & Johann, 2022).

2.2 Digital Conditionality

Digital conditionality is described as the rising expectation for beneficiaries to demonstrate their entitlement and compliance through continuous engagement in the digital process rather than through proving their eligibility and compliance during regular face-to-face interviews. In contrast to the traditional conditionality framework, digital conditionality is characterised by compliance being sustained throughout the process of digital information production.

When it comes to the system of Universal Credit, beneficiaries are expected to give timely updates regarding their earnings, document the activities associated with looking for a job, and stay active in the online platform. The result is the development of what has been recently termed a continuous administrative visibility framework, implying that entitlement becomes a permanent state attained through continuous digital interaction (Bouwmeester, 2025; Morrison, 2025).

Recent research indicates that this policy framework places high administrative burdens on the beneficiary. Bennett et al. (2025) identify the temporal, financial, and psychological costs of the adoption of the automation framework of administering welfare programs. Empirical research conducted on the experiences of welfare recipients shows that digital conditionality exacerbates inequality among welfare recipients who lack the skills and access to devices (Halliday et al., 2024). Academics today tend to believe that digital conditionality transforms welfare payments from a right into a status (Morrison, 2025; Eubanks, 2021).

2.3 Digital Welfare State

The concept of the digital welfare state can be perceived as the systemic transformation of welfare administrations using data infrastructures, algorithmic governance, and platform governance. It means increasing reliance on databases, automated decision-making, and interagency data sharing to manage the eligibility, compliance, and risks of citizens. Recent comparative research highlights three key mechanisms behind the operation of digital welfare states: (1) datafying citizen behaviour, (2) automation of administrative decisions, and (3) integration of algorithmic classification into public service delivery (van der Veen & Yerkes, 2023).

Collectively, these mechanisms transform welfare governance through the monitoring and prediction of citizen behaviour in real time. From this perspective, welfare governance becomes the administration of platform infrastructures where social rights can only be accessed through digital interfaces. Halliday et al. (2024) refer to this approach as "interface-first bureaucracy," wherein the digital system design constrains citizen interaction with the welfare state rather than promoting access.

Nonetheless, the literature raises an important caveat regarding the technologically deterministic approach in viewing the evolution of welfare administration. According to recent scholars, digital welfare administrations represent conscious political decision-making concerning how states govern, account for their performance, and allocate resources. Therefore, algorithmic infrastructures can be considered as political constructs that embody certain political normativity of deservingness, risk management, and compliance.

The majority of recent studies agree that digital welfare states dramatically change the power dynamics among citizens, welfare professionals, and institutions by transforming surveillance practices into part of administrative work, making conditionality continuous, and making the provision of benefits and services increasingly data-dependent (Bennett et al., 2025; Halliday et al., 2024). Parton (2019) argues that social work and welfare are shifting from "social" to "information," where knowledge production and decision-making is carried out through data systems, evidencing a wider reorganisation of welfare governance centred on information infrastructures.

2.4 Algorithmic Welfare Governance: A Mechanism-Based Model

Extending the literature on digital welfare states, this paper proposes a theoretical innovation of the notion of welfare governance in the age of algorithmic transformation. Contrary to the current practice of examining algorithmic surveillance, digital conditionality, and administrative burden as three independent variables of analysis, this paper conceptualises them as interconnected instruments of a single welfare governance paradigm, known as algorithmic welfare governance.

Algorithmic welfare governance denotes a socio-technical order whereby the provision and regulation of welfare entitlement emerge from the perpetual interplay of three instruments of governance: datafication through surveillance, continuous conditionality, and automated classification systems. Divergent from conventional welfare systems characterised by periodic assessment of eligibility based on administrative judgment, the process of algorithmic welfare governance rests on continuous data extraction and behavioural assessment.

Under this scheme of welfare governance, surveillance goes beyond the act of monitoring and functions as a tool for creating the "legible" subject of welfare provision through the generation of data. Digital conditionality ceases to be an imposed requirement and acquires an inherent character of digital welfare administration, demanding continuous performance of eligibility through participation in the digital platform.

In summary, the notion of algorithmic welfare governance offers a new perspective on the way in which Universal Credit transforms welfare relations by merging surveillance, conditionality, and automation into one cohesive process. The approach outlined here does not treat surveillance, conditionality, and automation as separate aspects of the digital welfare state but rather sees these aspects as a set of governance mechanisms transforming the welfare system.

3. Methodology

3.1 Search Strategy and Study Selection

A replicable and rigorous methodology to increase transparency and robustness was adopted by conducting a structured search procedure. A systematic, yet interpretive data collection was used, which is in line with qualitative policy synthesis methods in the context of social policy studies.

Literature was searched via academic databases including Scopus, Web of Science, Google Scholar, JSTOR, and SocINDEX. Key search terms included: 'Universal Credit', 'algorithmic governance', 'digital conditionality', 'welfare surveillance', and 'automated decision-making'. The search period (2016–2025) was chosen because it encompassed the stage of UC rollout in the UK designated as "expansion" and the stage of consolidation of digital welfare reforms through greater reliance on algorithmic governance and automated decision-making, so that the study context was relevant to the current state of digital welfare transformation in the UK and OECD contexts.

Apart from scholarly papers, grey literature was included as well, including policy documents from UK DWP, automation strategy reports and digital transformation frameworks published during the period from 2016 to 2025. Grey literature is included because it is directly related to policy implementation and algorithmic governance in the case of Universal Credit.

The inclusion criteria were: (i) a focus on digital welfare systems or Universal Credit either empirically or conceptually, (ii) relevance to algorithmic governance, surveillance, or conditionality, and (iii) appearance in peer-reviewed academic journals or government reports. Opinion pieces without an empirical foundation, non-English-language documents, and articles failing to address welfare digitalisation were excluded.

From the above search strategy, 26 documents were identified for analysis. This selection process involved a three-stage screening of title screening, abstract screening, and full text review. While 26 documents might seem to be small for an analysis of this kind, in the realm of qualitative policy synthesis this size is appropriate in that it places value on analytical depth rather than coverage. A sufficient level of conceptual saturation was reached with the selection of the corpus.

3.2 Data Analysis and Coding Procedure

The collected data were analysed using the methodological approach called thematic synthesis analysis in line with qualitative synthesis (Thomas & Harden, 2008). The process consisted of three sequential stages. Firstly, an open coding process was performed by carefully analysing the policy documents and academic literature that referred to algorithmic surveillance, digital conditionality, administrative burden, and automated decision-making. Secondly, the codes were organised into descriptive themes by examining repeated patterns within each dataset. Finally, analytical themes were formulated by comparing information from multiple data sets in order to interpret the ways in which these instruments contribute to the transformation of welfare governance and social work.

To ensure the credibility of analysis, the triangulation process was employed by incorporating three different evidence bases: peer-reviewed academic literature, UK policy documents, and empirical research on claimants. Analytical rigour was furthered through an iterative process in which codes were constantly revised in view of new data obtained. Reflexivity was observed at all stages of analysis, as there is always the risk that one's own assumptions may unconsciously affect qualitative synthesis.

3.3 Justification of Methodological Approach

Despite the frequent use of systematic reviews in policy research, this research employs a qualitative policy synthesis method because of the explorative and theorising nature of the research question. While systematic reviews focus on aggregation of results, this research emphasises conceptualisation and mechanism understanding within socio-technological welfare systems.

Due to the intricacy of the issue surrounding algorithmic governance within Universal Credit, conducting a solely systematic review may lead to the separation of the policy, technology, and institution. This is where qualitative synthesis becomes essential in synthesising heterogeneous evidence while maintaining an in-depth and conceptual approach to the matter.

3.4 Methodological Summary

In essence, this research follows an interpretative framework of policy synthesis that combines systematic search methods and interpretive thematic analysis. The use of peer-reviewed academic sources, policy documents, and empirical studies allows for a layered analysis of algorithmic welfare governance in the context of Universal Credit. The research is focused on developing a conceptual model and analysing the mechanisms underlying the processes under study rather than producing statistical generalisations.

4. Findings

4.1 Algorithmic Risk Production as a Governance Mechanism

As shown from the analysis, fraud detection and compliance monitoring of UC are conducted in a predictive governance mode, which is an algorithmic risk production mechanism rather than reactive administrative practices. Rather than waiting to detect frauds after their occurrence, the process of categorising risks is a continuous one where risk categorisation is performed using claimants' behaviour as statistical risk indicators.

This takes place in terms of transforming administrative data into risk indicators. Such data as income variability, job searching activities, and inconsistencies in reporting become statistical risk indicators, which are used to prioritise surveillance and compliance action.

The Department for Work and Pensions has put greater reliance upon automated systems of detection of fraud which sift the data of claimants for odd patterns of behaviour. Campaign organisations and select committees has identified that these systems disproportionately impact on the most vulnerable claimants, and the algorithms upon which such automated

decision-making processes is often opaque. Moreover, through the use of online journal reporting under universal credit, this digitalising of the welfare system means the continuous monitoring of a claimant's behaviour.

This reflects a general pattern of digitalisation of sociality where digital technologies now determine and subject behaviours to analysis.

Haq (2025) observed this tendency when observing that human behaviour still provides arguably the most significant security risk on the internet, reflecting that what people think of as safe on-line behavior, may not be the behaviour that they enact online.

The importance of this mechanism from an analytical perspective stems from its pre-emptive nature, which means that governance is not a reaction to fraudulent activities but a prediction of such activities. The way welfare administration is carried out is transformed from evidence-based decision making to probabilistic governance, where classification precedes verification. This changes welfare administration as a relationship from the exceptionality of suspiciousness to suspicion as a normal administrative practice.

4.2 Continuous Verification as a Temporal Governance Structure

The need for perpetual claimant updates is a temporal restructuring of the process of welfare governance. Instead of distinct points in time at which assessment takes place, UC functions according to continuous verification cycles, whereby entitlement is continually provisional and requires continual confirmation.

This happens by means of the incorporation of verification into daily digital transactions. Every interaction a claimant engages in with the system produces information fed into the assessment processes and thus creates a feedback loop, whereby compliance is not a result but rather a state achieved through the use of the system. Entitlement does not depend on a particular point in time but is recalculated on the basis of current input data, making governance a question of continuous recalibration rather than assessment.

4.3 Administrative Burden as System-Produced Structural Effect

Administrative burden is not only a by-product of the system but also the consequence of its digital nature. The obligation to provide information regularly, demonstrate compliance and interact with the system imposes procedural burden on the claimants.

Administrative burden stems from the segmentation of welfare engagement into numerous digital micro-processes that have to be validated, documented, or verified. Despite their insignificant nature individually, such micro-burdens create substantial cognitive, temporal, and emotional burdens altogether. By imposing additional complexity on individuals with lower levels of digital literacy and less stable socioeconomic standing, the system differentiates access as its governance output. Administrative burden is thus not merely an effect but a by-product of the process.

4.4 Automated Classification and the Redistribution of Decision Authority

Decision-making power is partially transferred from the frontline practitioners to algorithmic classifications in the process. Human involvement remains an important part of the decision-making process; however, it becomes embedded in the structured framework of decisions that is formed through automated outputs.

The algorithmic systems provide the framework of interpretation through classification outputs (risk scores, compliance signals, etc.) that define the parameters for interpretation prior to it. Practitioners work within these predefined frameworks, which implies that their discretion takes place in the context of algorithmically defined criteria. The result is a multi-tiered governance framework in which the authority to govern is shared between humans and machines, with algorithmic systems playing the dominant role at the stage of decision framing.

4.5 Socio-Technical Interaction and Governance Coupling

Across all mechanisms, the analysis shows that UC uses a socio-technical coupling of administration practices and information technology infrastructure for its operation. It cannot be found in institutional processes or algorithms alone but emerges out of their constant interactivity.

The process of coupling unfolds in a series of recursive feedback loops:

- claimant behaviour leads to data generation;
- data leads to classification of claimants;
- classification determines institutional actions;
- institutional actions shape claimant behaviour.

In effect, this creates a self-reinforced mechanism of governance in which the process of welfare administration gets constantly upgraded through its very output. The formation of an adaptive system of governance results, where system rules are defined dynamically through data rather than being fixed administratively.

5. Discussion

5.1 Reframing Universal Credit as Infrastructural Governance

The analysis reveals that it is important to view the development of the Universal Credit programme as infrastructural governance, wherein administrative power is exerted not through traditional channels, but in the context of data-based technologies. Instead of viewing administrative power in the framework of decision making performed by institutions, governance is distributed through socio-technological procedures which constantly produce, analyse, and act on the basis of claimant data.

As opposed to the extant theoretical approaches in the discussion of digital welfare states, this perspective is more specific regarding the implementation of governance at the procedural level. The combination of data extraction, behavioural translation, and automated classification shows that digital systems not only facilitate but also constitute governance processes in welfare administration. Through the algorithmic embedding of surveillance in routine claimants' interactions, Universal Credit reshapes governance of the welfare state, making continuous behavioural monitoring business as usual for claimants' benefit receipt.

Notably, this does not amount to a complete shift in governance away from institutions toward computational processes. Human actors continue to play an important role in the implementation of welfare reforms; instead, their roles are increasingly framed through infrastructure that determines which data is accessible, how data is understood and what actions should take priority.

5.2 Positioning Against Efficiency-Based Accounts

Efficiency, consistency, and fraud prevention have dominated the narrative around the digitalisation of UC. According to this narrative, efficiency results from automation as it improves decision-making through error reduction, consistency, and timely data processing (Department for Work and Pensions, 2025). The proponents of algorithmic governance even claim that it eliminates potential for personal bias at an individual level and increases fairness among mass populations (van der Veen & Yerkes, 2023).

However, the observations presented above do not negate those claims, yet they demonstrate their analytical insufficiency. Efficiency might be achieved, but its sole focus fails to reveal the extent to which the entire process of welfare governance changes due to this innovation. The dynamics revealed in this study and overlooked by efficiency theory include:

- constant creation of new administrative categories via algorithmic operation;
- asymmetrical visibility of claimants compared to the system's opacity;
- relocation of compliance responsibilities to claimants via verification process.

It is clear that algorithmic systems influence welfare governance beyond optimisation; thus, they require a complementary theoretical framework to explain the phenomena observed.

5.3 From Surveillance to Socio-Technical Structuring

While surveillance is still a valid term, the analysis indicates that it might not provide a sufficient framework for understanding digital welfare on its own. The present findings show that the role of data-driven infrastructures should be considered within a broader context.

The appropriate interpretation is that Universal Credit employs a strategy of socio-technical structuring where technical elements of the system are used to produce specific behavioural requirements. Rather than imposing visibility, the data infrastructure structures visibility by making decisions regarding what can be observed, how it should be interpreted, and when it triggers actions. Hence, analyses of welfare reform have to include both political and technological factors.

5.4 Reconsidering Conditionality in Digital Contexts

These results also help address the issue of conditionality, indicating that digitalisation not only affects the magnitude but also the form of conditionality. The conventional approach assumes conditionality as a package of external conditions being evaluated periodically. UC instead creates conditionality through continuous interactions where the fulfilment of conditions is achieved through constant engagement with the system.

One should be cautious about overgeneralisation, however. Differences could also arise in regard to the claimants' access to digital technologies, technological literacy and case work complexity. While the system ensures constant monitoring, the

effects will differ according to the specificities of each claimant. This analysis gives a more complete understanding of the nature of digital conditionality as a process of evolution rather than revolution of welfare systems.

5.5 Implications for Social Work: Mediated Professional Practice

There are also consequences of the use of algorithmic systems on social work practice, specifically in terms of professional independence and judgment. The results indicate an increasing trend among social workers to practice in environments where the process of gathering information, assessing risks, and prioritising cases is conducted via digital systems.

The presence of such technologies does not mean the end of professional judgment. Instead, it indicates its structuring through system classification. Consequently, judgements are being made according to certain criteria established by algorithms. The question is not about the inherent good or bad of such systems, but about the conditions of their operation.

5.6 Theoretical Implications: Toward a Mechanism-Based Understanding of Digital Welfare

This paper adds to the social policy literature in its theorisation of digital welfare governance via mechanisms of data extraction, behavioural translation, and automated classification. The results show that digital welfare governance is not solely characterised by three distinct phenomena: surveillance, conditionality, and automation; it is constituted by interrelated processes that transform welfare administration. By identifying the mechanisms that underlie digital welfare governance, the study redirects scholarly attention from outcome-based approaches to more nuanced process-oriented studies.

Overall, this paper suggests that there is a need for a paradigm shift in the ways that digital welfare systems can be conceptualised in social policy scholarship. Future studies should move beyond conceptualising digitalisation in terms of efficiency, surveillance, and administrative innovations, and instead address the mechanisms involved in the making of welfare states in the digital age.

5.7 Synthesis

Overall, the findings suggest that Universal Credit can be seen as part of the wider shift towards a model of governance based on socio-technical infrastructures. It does not mean that Universal Credit is a radical departure from existing welfare systems; on the contrary, it can be described as a gradual change, where digitalisation plays an increasingly prominent role in welfare governance.

Proponents of digital welfare systems point to the gains of administrative efficiency, speed of benefit administration, operational cost reduction and increased fraud control achieved by automatisation of welfare administration. Proponents often see algorithmic systems as value-neutral without paying attention to the embeddedness of social biases within the datasets, classification schemes and institutional designs of the system.

6. Conclusion

The current article has focused on Universal Credit as a particular example of digital welfare change. By employing a qualitative policy synthesis method, it argues that Universal Credit can be understood as reconfigured welfare governance based on data infrastructures, rather than merely an administrative change. The study shows that welfare provision is embedded into new systems of data processing, classification, and platform interactions.

The main contribution of this research involves illustrating how these processes work together to form a networked governance system. By understanding UC within a mechanism-based approach, involving data extraction, behavioural coding, and automatic categorisation, the results enable a more accurate depiction of welfare governance in socio-technical systems. This departs from considering whether there is surveillance or conditionality in the process, to thinking about the generative mechanisms behind the organisation and exercise of administrative power.

This transition, however, should not be viewed as definitive. Even though the results show increasing use of continuous monitoring and data categorisation, this trend occurs differently in various scenarios and is moderated by institutional and professional considerations. Considering UC in this way does not offer deterministic insights but recognises the essential restructuring possible via digital technologies.

6.1 Policy Implications

Algorithmic welfare governance is raising fundamental issues about transparency, accountability and the digital divide. Though the development of digital technologies may enhance administrative effectiveness, it simultaneously exacerbates forms of surveillance and behavioural control that have differential impacts upon vulnerable groups. In developing the future strategy of the digitalisation of welfare, policymakers must integrate independent review mechanisms, a transparent procedure of algorithmic examination, a meaningful right of appeal, and protection of claimant rights. The application of technology for modernisation in the administration of welfare should not jeopardise procedural fairness, discretion, and social justice principles.

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