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Experiencing Social Exclusion and Distrust: Mental Health Rehabilitees Struggling With Digital Administrative Burdens

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Abstract

The digital welfare state has been transforming into a type of state structure in which the citizen no longer faces the official in person, but interaction instead occurs with system-level bureaucracy, and decision-making takes place in an algorithmic system's frame. This article aimed to determine what kind of burden digital self-service and algorithmic decision-making poses to people with mental health problems. The article contributes to the social sustainability literature by introducing the concept of digital administrative burden and how it can create social exclusion and distrust in public administration among vulnerable citizens. Drawing on social representation theory and the concept of social identity, we examine how the digital administrative burden faced by mental health rehabilitees affects their identity and self-perception. The data gathered comprises audio-recorded group discussions with mental health rehabilitees. Based on the data, it can be demonstrated that digital citizen–state encounters create subject positions for mental health rehabilitees that portray them as dispossessed, unreliable, insignificant, and inferior. The positioning of mental health rehabilitees highlights how administrative burdens in digital citizen–state encounters contribute to social exclusion, preventing the full realisation of their citizenship. It can be stated that digital burdens imposed by automated administration on those dependent on social benefits can endanger society's social sustainability. This is particularly irritating because the welfare state's capability and commitment to social sustainability are crucial in preventing development of inequality and polarisation between different population groups.

Keywords

digital administrative burdens; digital citizen–state encounters; mental health rehabilitee; social exclusion; social sustainability

1. Introduction

The digital welfare state describes a type of state structure in which diverse digital technologies—such as automated systems, algorithms, big data analytics, and artificial intelligence (AI)—are incorporated into government agencies' management and delivery of welfare services. In some instances, these services are provided through a network of contracted providers, a concept known to social policy scholars as "the mixed economy of welfare" (van Toorn et al., 2024). Thus, the state's operations have changed through digitalisation. Bovens and Zouridis (2002) described a transition from "street-level bureaucracies," in which citizens engage directly with public officials in physical offices, to "screen-level bureaucracies," in which interactions occur in person, over the phone or through online chat with bureaucrats who are working behind screens, and ultimately system-level bureaucracy, in which decision-making on welfare benefits takes place in an algorithmic system frame. In many areas of social services, citizens are engaging more frequently with governments via digital platforms and mobile applications (Henman, 2019; Schou & Hjelholt, 2018). The goal of digital welfare states is to enhance access and efficiency in service delivery while significantly cutting costs. This is achieved by minimising reliance on manual human tasks and administrative work, and by using algorithms to automate decisions regarding eligibility, service levels, and other aspects of social resource distribution for individuals and their families (van Toorn et al., 2024).

The rise of algorithmic systems and self-transactions in digitalized public services has included the promise of providing services more efficiently, with more transparent, value-neutral, impartial, and fair decision-making (Bovens & Zouridis, 2002; Casey, 2022; Wirtz et al., 2019). While it commonly is believed that digital technology's main advantage is its ability to automate tasks and improve efficiency, several extant studies have pointed out that human involvement is crucial for its functioning (Le Ludec et al., 2023; Pinchevski, 2023). In practice, citizens, as benefit claimants, operate as human co-producers of public information systems, requiring citizens to provide all necessary information, verify calculations, and present evidence to contest algorithmic decisions. This has shifted the burden of proof, which, in cases of alleged debts, has been described as a form of extortion (Carney, 2020). In digital welfare states, it has been observed that automation leads to greater administrative burdens as agencies become more data-hungry to support complex eligibility testing, verification and compliance (Madsen et al., 2022; Peeters, 2023).

Bureaucratic processes associated with automated systems are likely to shape barriers that citizens face when interacting digitally with the state. According to Peeters (2020), these barriers are unlikely to be intentional but may arise from the complexity of service systems that cannot be adapted to simple rule-based automation (Larsson, 2021). Thus, administrative burdens can be unintended results of large-scale digitalisation and algorithmic decision-making processes in which some citizens do not fit into predefined boxes and stereotyped categories (Peeters & Widlak, 2018). For example, Griffiths (2024) demonstrated how people with irregular pay dates risk missing out on benefits for which they are eligible because automation processes do not account for irregular cases. Similarly, Widlak and Peeters (2020) have stated that some citizens face various administrative burdens in correcting errors made by these algorithmic systems. Administrative burden originally was defined as citizens' onerous experiences with policy implementation (Burden et al., 2012; Halling & Baekgaard, 2024). In the field, administrative burden has been thought to materialise as compliance, learning, and psychological costs that citizens experience in citizen–state encounters (Halling & Baekgaard, 2024). Although administrative burden increasingly is being

examined in the context of algorithmic administrative systems, only a few scholars are using the concept of digital administrative burden in their research (Peeters, 2023).

This article is motivated by the question of what kinds of costs people with mental health problems incur due to the digital administrative burdens of self-service and algorithmic decision-making. Extant research has suggested that compliance costs (meeting requirements to access government services or benefits), learning costs (the effort required to understand bureaucratic processes), and psychological costs (e.g., stress or frustration) may be prevalent in digital bureaucratic encounters, as citizens require skills to navigate the digital administrative encounters and often are blindsided as citizens confront information sources and a lack of algorithmic transparency (Larsson, 2021; Madsen et al., 2022). In our novel formulation of the digital administrative burden, research on cost is combined with an examination of social identities formed by the mental health rehabilitees' experiences with the digital administrative burden, potentially influencing how they position themselves as citizens and members of society. Drawing on social representation theory (Moscovici, 1976/2008, 2000) and the concept of social identity (Duveen, 2001; Duveen & Lloyd, 1986; Howarth, 2002), we examine how mental health rehabilitees' understandings of digital administrative burdens encompass discourses about their identity and what kinds of effects digital administrative burdens and their costs may exert on the development of social sustainability in digital citizen–state encounters. The article contributes to the social sustainability literature by introducing the concept of digital administrative burdens and how they can create social exclusion and distrust towards public administration among vulnerable citizens. To accomplish this objective, we analyse (a) mental health rehabilitees' experiences through citizen–state interactions in digital encounters and (b) how administrative burdens and their costs shape mental health rehabilitees' identity from such encounters.

2. Social Sustainability in the Digital Welfare State

Extant research has demonstrated that mental illness is associated with low household income, poverty, and long-term unemployment (e.g., Knifton & Inglis, 2020; Lund et al., 2018). Many individuals with mental illness have less access to modern technologies, such as smartphones and the internet, compared with the general public (e.g., Spanakis et al., 2021). Thus, use of online services requires additional mental and financial effort from them. Furthermore, many people with mental illness possess limited digital skills. The most commonly missing skills were handling passwords, using device settings, and solving online problems (Spanakis et al., 2021). Along with material deprivation (e.g., personal finances and living situation) and lack of digital skills, various aspects of mental health are identified as barriers to engaging with online services. Thus, compared with other population groups, people with mental illness are at greater risk of potential unfair treatment by automated systems, as they need public services more than the average population segment. Extant research conducted with individuals with mental health backgrounds in Finland has found that although high-level digital skills were observed, trust in providers of digital services within the healthcare and social welfare sector remained low, particularly among younger participants (Tetri et al., 2024).

As many vulnerable groups of citizens, such as mental health rehabilitees, are both targets of implementation of automated systems and the largest user group for public benefits, the dynamics of trust primarily concern how mutual trust is built between public authorities and these citizens. The dynamics of trust between public authorities and vulnerable citizens is crucial, particularly in the context of implementing automated systems and providing public benefits.

As citizen–state encounters increasingly take place digitally, and authorities operate through automated systems, digital platforms become important sites for enacting one's citizenship and living out social sustainability. Digital social sustainability has been discussed in the corporate world and at the community level, including in cities (Osburg & Lohrmann, 2017). When discussing sustainability in the digital welfare state, we need definitions in which social sustainability operates on a full societal level. In extant digital transformation research, digital social sustainability refers to "the ways in which digital technology is designed and used to support and promote social equity, fairness and well-being, as well as to address social challenges, such as inequality, poverty and social exclusion" in society (Nosratabadi et al., 2023, p. 11). There has been increasing critical discussion about "the dark side" of algorithmic governance in liberal democracies, casting doubt on whether algorithmic systems can follow the principles of good administration (e.g., Oswald, 2018; Veale & Brass, 2019). Equity, fairness, and well-being in the definition can be thought to refer to principles of good administration, such as equality of treatment, transparency, and responsiveness to citizens' needs (Roehl, 2023). Social sustainability intersects with institutional and social trust, and in this article, we focus in particular on experiences in which the digital administrative burden causes or affirms potentially socially exclusive identities for marginalised citizens as users of algorithmic systems. These systems' design has been known to be motivated often by policymakers' distrust towards marginalised citizens, treating them as potential fraudsters (Parviainen et al., 2025), whereas recurring experiences with digital exclusion among citizens can rupture social cohesion over time, resulting potentially in more basic distrust between citizens and the state, threatening the entire society's social sustainability. When digital citizen–state interactions are placed at the heart of the welfare state's sustainability, algorithmic governance can maintain citizens' trust only if people feel that they are being treated fairly, with dignity and respect. We argue that the welfare state's capability and commitment to these principles are crucial in preventing the emergence of inequality and polarisation between different population groups.

As noted, automated systems are viewed as increasing government efficiency and reducing compliance costs for citizens, but a growing body of literature suggests that citizens in vulnerable situations may incur costs caused by digital administrative burdens (Moynihan et al., 2015; Peeters & Widlak, 2018). Herd and Moynihan (2018) highlighted these burdens' consequential, distributive and constructed nature, arguing that failure to overcome these burdens can lead to citizens' exclusion from rights, benefits, and services to which they are formally entitled. A key insight into administrative burdens is that their consequences are not equally distributed across the population. Similarly, digital burdens are likely to affect certain target groups more than others, leading to distributive effects from government digitalisation. For example, vulnerable groups have been known to be affected disproportionally by burdensome procedures, which often arise because of decisions related to resource allocation and the design of policies, programmes, and administrative procedures (Peeters, 2020).

3. Data, Methods, and Ethical Considerations

The research data were gathered in Finland from a centre that provides training for experts by experience. The role of experts by experience, as former service users, is to support the rehabilitation of substance users and those suffering from mental health problems by drawing on their experiential knowledge. The Ethical Committee of the Tampere Region approved the present study (decision 49/2022), which followed ethical guidelines from the Finnish National Board on Research Integrity (2023).

The research data were generated from audio-recorded group discussions involving mental health rehabilitees and experts by experience. Seven two-hour group discussion sessions were conducted in autumn 2023 and spring 2024. These group discussions served as forums for mental health rehabilitees and experts by experience to come together and share their experiences with digitalised public services when claiming social benefits, searching for a job, and/or dealing with social and health services. Altogether, the group discussions comprised 35 participants, who were either on disability pension or unemployed job seekers, ranging in age from 28 to 55. All the participants had experience with digital citizen–state encounters, having claimed welfare benefits when their income and assets did not cover their essential daily expenses. Most of the participants used digital services provided by the Social Insurance Institution of Finland (Kela), which is responsible for implementing basic social and disability benefits, as well as basic unemployment allowances in Finland. Kela uses automation in routine tasks and when decisions are completely undisputable (Kela, 2025). The Finnish government has designed new legislation to make electronic notifications of public administration the primary option for citizens in administrative communication, but the objective is a gradual transition to digital services as the primary channel for accessing public services in general (Ministry of Finance Finland, 2025).

The topics of the group discussions fell under two main themes: (a) experiences that people with mental illness have in digital citizen–state encounters and (b) how algorithmic decision-making, which is used in benefit eligibility, affect people with mental illness. In the analysis of the group discussions, we used two parallel analytic strategies to examine social representations and identities: thematic content analysis (Vaismoradi et al., 2013) and discourse analysis (Hall, 2001; Potter & Wetherell, 2002). Initially, the group discussion data were classified using thematic content analysis (Vaismoradi et al., 2013). The content-analytic reading method served as a preliminary tool for examining the research material. The analysis began by reading the data set regarding mental health rehabilitees and experts by experience. The text then was condensed and grouped into subcategories based on how they described the administrative burdens that the interlocutors experienced. The subcategories were grouped further into main categories, which represented the views of experts by experience and mental health rehabilitees regarding administrative burdens in digital citizen–state encounters. Table 1 illustrates how the interlocutors' experiences with digital citizen–state encounters create various subject positions and ultimately lead to social exclusion.

Table 1 indicates that learning costs create the subject positions of an unreliable person, an insignificant person, and an inferior person for mental health rehabilitees and that this positioning engenders socially excluded citizenship among these individuals.

After using the content-analytic reading method, we analysed the group discussion material by relying on social representation theory (Moscovici, 1976/2008, 2000) and the concept of social identity (Duveen, 2001; Duveen & Lloyd, 1986; Howarth, 2002). Social representation theory enables us to study the relational and symbolic dimensions of interaction (Campbell & Jovchelovitch, 2000) and, thus, helps in understanding citizenship as an "interactional matter" (R. Barnes et al., 2004) realised in the intersubjective space between policymakers and citizens in digital public service contexts.

Social representations are systems of social knowledge collectively constructed and reconstructed through communicative interactions and social practices (Moscovici, 1976/2008). In digital citizen–state encounters,

Table 1. Analysis of the mental health rehabilitees' experiences with administrative burdens, termed "learning costs," in digital citizen–state encounters.

Learning costs			
Original expression	Condensed expression	Subcategory	Main category
We are just cases on paper, and that's why I feel mistrust towards decision-making, which is happening somewhere online by anonymous and faceless people.	*We are just cases on paper.*	The subject position of an insignificant person The term "insignificant" refers to something or someone that is not important, notable, or influential.	Socially excluded citizen
The people from the job market service who make decisions about my ability to work or other things do not trust me; they want to know about me and ask for information because they think I'm cheating.	*The people from the TE service…don't trust me. They think I'm cheating.*	The subject position of an unreliable person The term "unreliable" refers to something or someone that cannot be depended on for consistent accuracy, truthfulness, or performance.	
I always encounter such pitfalls in the system that are not even there in Kela, so no one can advise me on what should be done next; it's probably because when there is an unemployed job seeker who is unable to work and when there is no direct position for such a person in the system…	*…no one can advise what should be done because I am an unemployed job seeker who is unable to work.*	The subject position of an inferior person The term "inferior person" refers to someone who is perceived to have lesser qualities, abilities, or value compared with others.	

common symbolic resources are shared by mental health rehabilitees and the benefits system to give meaning to rehabilitees' social and material worlds, and to help them navigate in these worlds, social representations inform the group's behaviours (Moscovici, 1984). Identities become meaningful in social interactions and practices through processes of positioning the self in relation to social representations that circulate in our environment, and by appropriating, reworking, and/or contesting these representations (Duveen, 2001). Various identity positions' availability within these networks of meaning is framed and constrained by contextual norms and values (Duveen, 1993).

The relationship between how others represent the groups to which we belong and how we construct ourselves becomes clear in the case of minority and socially excluded groups (e.g., Hodgetts et al., 2007; Howarth, 2002), such as people with mental illness, who are vulnerable to specific kinds of epistemic injustice, such as testimonial injustice, stigmatisation, and discrimination. Furthermore, self-distrust felt by vulnerable people based on their experiences and knowledge as epistemic agents is a complex combination of shame, self-accusation, feelings of oppression, and lack of proper concepts to express their feelings (Auvinen et al., 2021). In the case of digital citizen–state encounters, interactions between mental health

rehabilitees and public administrators in decision-making are asymmetrical in terms of symbolic and material power (e.g., status, access to information), thereby preventing mental health rehabilitees from participating in ways that adequately reflect their own concerns and needs (see also Ansell & Gash, 2008; M. Barnes & Coelho, 2009).

4. Results

We examined digital administrative burdens' impact on citizen–state encounters among mental health rehabilitees by (a) analysing mental health rehabilitees' experiences with these interactions and (b) examining how administrative burdens shape mental health rehabilitees' identity and contribute to social exclusion. We analysed the data in terms of costs caused by digital citizen–state encounters. These costs can manifest in various ways, including compliance costs (meeting requirements to access government services or benefits), learning costs (the effort required to understand bureaucratic processes), and psychological costs (e.g., stress or frustration). However, our analysis did not focus on these costs themselves, but on how they construct mental health rehabilitees' identity as members of society.

Our analysis found that learning costs and psychological costs in particular were prevalent in digital bureaucratic encounters, as mental health rehabilitees require skills to navigate these encounters and often are blindsided by information sources and a lack of algorithmic transparency. Aside from digital proficiency, mental health rehabilitees struggle with navigating complex bureaucratic processes due to opaque information sources and a lack of algorithmic transparency. Although extant studies have found that many people with mental health problems have difficulties using digital tools (cf. Spanakis et al., 2021), the mental rehabilitees who participated in the group discussions did not mention this, except for a few older participants. Our results support Tetri et al.'s (2024) research on mental health backgrounds in Finland, which found that although high digital skills were observed, trust in providers of digital services within the healthcare and social welfare sector remained low, particularly among younger participants. In our research, participants in the group discussions noted that they find it difficult to trust benefit processors because they do not interact with them face-to-face. The participants suspected that the distrust was mutual in digital encounters regarding benefit processing.

Compliance costs, learning costs, and psychological costs produced a marginalised position for vulnerable mental health rehabilitees. Based on the data, it can be demonstrated that all three cost categories create the subject positions of a dispossessed person, unreliable person, insignificant person, and inferior person among mental health rehabilitees. Mental health rehabilitees' positioning demonstrates how digital administrative burdens in citizen–state encounters build social exclusion and produce a socially excluded citizenship. Our analysis indicates that mental health rehabilitees, as social security recipients, are punished for needing to access services. This does not mean that punitive experiences with social security and employment services are new or caused by the adoption of automated technologies in service delivery. Many writers have chronicled social services delivery experiences as being punitive, from the 19th century to the present in America and in South Africa (Headworth, 2021; Super, 2021; Trattner, 2007). Similarly, Carney (2020) pointed out that, in Australia, social security recipients historically have been treated like economic scapegoats. According to Sleep (2024), what is new is the link between this punitive manifestation and the technological promise of efficiency, particularly in welfare compliance.

4.1. Being Dispossessed

Our analysis found that the compliance costs produced by administrative burden are common among the mental health rehabilitees who participated in the group discussions. In their case, economic factors, such as poverty, create exclusion because they cannot afford to acquire and maintain the digital tools needed to apply for financial benefits in the digital welfare state. Compliance costs particularly create the subject position of a dispossessed person among mental health rehabilitees. Being "dispossessed" means being deprived of land, property, or other possessions. It often refers to situations in which individuals or groups have had their homes, possessions, or security taken away from them. In Excerpt 1, a mental health rehabilitee, MHR1, highlights the contradiction that affects vulnerable people in the digital welfare state in particular, namely that one should be able to afford digital tools and maintain an internet connection to apply for financial support, but when no money is available—not even for food, housing or health services—the internet can be out of reach:

> MHR1: "But I always ponder and wonder how it can be made possible for everyone, meaning that to do something in the digital service system, you need to have an internet connection and the equipment to access it. So, I find it unlikely that such discretionary social assistance would pay for these devices for people." (Excerpt 1)

MHR1's turn highlights the necessity of having both an internet connection and the appropriate equipment to access digital services. Digital inclusion is a fundamental issue in ensuring that everyone can benefit from digital advancements. MHR1 expressed scepticism about whether discretionary social assistance would cover these devices' costs. This reflects a concern about current social support systems' adequacy in addressing digital inclusion. Ultimately, their pondering suggests a need for more inclusive policies that ensure everyone, regardless of their economic status, can access digital services. This might involve government or community initiatives to provide necessary equipment and internet access to those in need. Overall, MHR1's statement underscores the challenges of digital equity and the importance of addressing these barriers to creating a socially sustainable digital society.

Excerpt 2 highlights how the poor financial situation often experienced by mental health rehabilitees also can contribute to vulnerability, as individuals may rely heavily on public benefits and need to trust that they will receive the necessary support. MHR2 emphasised the importance of addressing both mental health and practical barriers to improve daily functioning and access to necessary resources, as well as their determination and resourcefulness in overcoming these obstacles:

> MHR2: "When the ability to function varies greatly between days, sometimes the technology itself causes difficulties. I didn't have an internet connection, I didn't have a laptop, I didn't have money, so I had to get myself five kilometres away to the local library and then from time to time to take care of these things." (Excerpt 2)

MHR2's statement highlights several challenges that stem from both mental health issues and practical barriers in digital citizen–state encounters. First, the interlocutor's ability to function varies greatly from day to day due to mental health issues, which can be unpredictable and challenging. Second, the lack of an internet connection and a laptop creates significant obstacles to managing benefit encounters, which require digital access. Third, limited financial resources complicate the situation further, making it difficult to afford necessary

technology. Despite these challenges, the interlocutor demonstrates resilience by traveling five kilometres to the local library to access resources and manage tasks.

Excerpt 3 reflects a sense of exclusion and difficulty in adapting to digital advancements. The interlocutor acknowledged the risk of being left behind in the digital era, stemming from a lack of early exposure to technology. They expressed a feeling of not having a natural inclination towards or interest in information technology, which makes it challenging:

> MHR3: "And somehow, I recognise it. I have been at a big risk of being excluded from this digital development. Yeah. When we were young, we didn't have any computers at home, nothing…but I don't have it naturally either. I feel like I don't have the same interest in anything related to information technology, that it is in principle it is always a bit challenging." (Excerpt 3)

MHR3 feels they are at risk of being excluded from digital development, highlighting a gap between their experiences and the rapid pace of technological advancement. Growing up without computers at home has contributed to their current challenges with technology. The interlocutor does not have a natural interest in information technology, which adds to the difficulty faced in engaging with it. Regarding the digital welfare society's social sustainability, MHR3 seems to suffer from digital exclusion, passed on from one generation to the next, in which difficulties in using digital devices manifest as a transgenerational problem. Thomas et al. (2020) found that it is a key concern within the sector that increasing reliance on digital services excludes those with limited access to digital devices, data or reliable internet coverage. Our analysis also found that digital exclusion is particularly prevalent among the most vulnerable service users, such as mental health rehabilitees.

4.2. Being Unreliable

Research data from the group discussions indicated that mental health rehabilitees' experiences with digital citizen–state encounters are determined by perceptions that they are unreliable individuals. The term "unreliable" refers to something or someone that cannot be depended on for consistent accuracy, truthfulness or performance. For example, an unreliable source might provide incorrect information, or an unreliable person might fail to fulfil promises. Digital public services often are designed to contain algorithmic tools for tracing potential fraudsters (Parviainen et al., 2025), so interlocutors obviously sense the basic distrust towards citizens targeting them behind the system. The following excerpts reveal a phenomenon that we defined as digital administrative burden in the Introduction. Due to the transition to self-service and automation in decision-making, citizens increasingly are required to act as advocates for their own affairs but cannot be sure how officials will respond to their arguments or pleas about their own situations. This uncertainty causes stress and anxiety for many.

In Excerpt 4, the psychological costs produced by the digital administrative burden are well-highlighted and arise from how MHR4 must send documents about his income and expenses electronically. MHR4 described themself as a person without privacy because they are not trusted. They must prove their eligibility every month because they are viewed as an unreliable person. This incurs a psychological cost for MHR4, which they expressed as sadness. Furthermore, the excerpt portrays MHR4's frustrations with the lack of privacy, limitations, and conditions on their access to social assistance and the repetitive process they must endure

each month. It conveys a sense of disappointment and stress that accompanies the application process and the outcomes' uncertainty:

> MHR4: "I have no privacy when I apply for basic social assistance. Everything must be delivered, including bank account statements. Although it is promised there that you could get social assistance for six months, but when it is affected by certain other benefits, it saddens me that I will never get it for that long. I must make a new application every month. And always the stress of getting through it and what comes out of it…" (Excerpt 4)

The interlocutor expressed their frustration with the lack of privacy they have experienced when applying for basic social assistance. The expression stated that they are required to share personal information, including bank account statements, as part of the application process. This suggests a lack of confidentiality and boundaries between the individual and the aid agency. The interlocutor's disappointment stems from being promised social assistance for six months, but this promise is affected by certain other benefits. This implies that their access to social assistance is contingent on meeting specific criteria or having a limited eligibility period. The interlocutor expressed sadness at the realisation that they may not receive this assistance for an extended period of time due to these factors. The burden of the process is highlighted when the interlocutor mentions the need to file a new application every month. This suggests a repetitive and time-consuming task that adds stress to the interlocutor's life. The stressfulness of the system is highlighted by the fact that Kela has access, for example, to national income register. Moreover, the system could probably be much less repetitive for the benefit claimants than it is. The interlocutor's anxiety is emphasised further when they mentioned the uncertainty of the application process, indicating a lack of transparency and control over their situation and outcomes.

Excerpt 5 illustrates the learning costs that mental health rehabilitees face in digital citizen–state encounters. The excerpt ties into the phenomenon described by Bovens and Zouridis (2002) concerning the transition from "street-level bureaucracies," in which citizens engage directly with government officials in physical offices, to "screen-level bureaucracies," in which interactions occur in person, over the phone or through online chat with bureaucrats who are working behind screens. This rehabilitee, MHR5, described how they often need assistance on what information to disclose or withhold to survive within the system. To receive their entitled welfare benefits, they must learn to act correctly from the system's perspective:

> MHR5: "The fact that you have somehow had to survive this way and ask for help so much, and then always thought about what it is worth to tell someone about yourself to get that help. When you have learned the system that if you tell someone about something, it prevents someone from getting a certain social benefit, that you must be alert." (Excerpt 5)

The experiences shared by MHR5 in Excerpt 5 prove that digital welfare services are less accessible to some citizens, leading to new discriminatory effects on low-income and underserved populations. The interlocutor reflected on mental health rehabilitees' experiences regarding their reliance on assistance and the constant evaluation of the value of sharing personal information electronically to receive this help. The interlocutor stated that they have had to survive in a particular manner and frequently asked for help, implying that they have faced challenging and difficult circumstances. The interlocutor's thought process revolves around weighing the costs and benefits of disclosing personal information in the pursuit of receiving assistance.

The interlocutor was cautious about sharing personal details, having learned that disclosing certain information may prevent others from receiving social benefits. This suggests that the interlocutor is aware of a competitive element within the system, in which resources or benefits are limited and potentially could be capped through disclosure of personal information. The interlocutor's statement that "you must be alert" indicates a sense of vigilance or caution that has developed within her due to these experiences. This highlights the interlocutor's perception that navigating the system requires constant awareness of how disclosing personal information can impact both her own access to benefits and opportunities available to others.

The commitment of another rehabilitee, MHR6, in Excerpt 6 continues to express the interlocutors' mistrust in the decision-making process that occurs online, conducted by anonymous and faceless people. The excerpt highlights the interlocutor's sense of being dehumanised and doubted by the employment service. They feel that their individual circumstances and integrity are not being considered, and that their trustworthiness is being questioned without proper cause. This contributes to their overall lack of trust in the decision-making process and a perceived need to provide documentation continually to validate his legitimacy:

> MHR6: "So, maybe it's because we are just cases on paper, and because of that, I feel mistrust in this kind of decision-making, which takes place somewhere online by anonymous and faceless people. And I'm thinking that, in the same way, these people from the employment services who make decisions about my ability to work or other things don't trust me. They want to know about me and are fishing for information, thinking that I'm cheating. That's why I must deliver all kinds of files to them." (Excerpt 6)

In this excerpt, the interlocutor begins by acknowledging that people who have to apply for benefits feel like mere "cases on paper," suggesting that they are reduced to impersonal, bureaucratic documentation, rather than being viewed as individuals with unique circumstances. This depersonalisation contributes to their overall mistrust of the decision-making process conducted by anonymous and faceless individuals online. For the interlocutor, screen-level bureaucracy creates a system that is onerous and more burdensome than street-level bureaucracy. The interlocutor believes that these decision-makers from employment services do not trust them, as evidenced by their persistent "fishing for information." The interlocutor suspects that this lack of trust stems from an assumption that they are engaged in some form of dishonesty or cheating. The mention of having to deliver "all kinds of files" implies that the interlocutor is required to provide various forms of documentation or evidence to prove his compliance or eligibility for certain benefits or assistance. This adds further to the interlocutor's frustration and suggests an excessive burden of proof being placed on them.

Tetri et al. (2024) found that digital proficiency alone did not bring trust in digital welfare systems with it, particularly among younger generations of marginalised people, who did not trust service providers. The digital welfare state is not operating in a vacuum, and mental health rehabilitees have faced several reductions in welfare services and benefits in recent years (Ahonen, 2022). More basic distrust towards the state may stem from previous negative experiences in interpersonal relationships, or from a general sense of social disconnect caused by former reductions, undermining trust in public welfare systems in general.

4.3. Being Insignificant

The group discussions with mental health rehabilitees paint a picture of individuals feeling insignificant. The subject position of an insignificant person created by the digital administrative burden becomes

particularly evident when interlocutors express their frustration with digital benefit transactions. The term "insignificant" refers to something or someone that is not important, notable or influential, suggesting a lack of significance, meaning, or impact. When applied to a person, it may indicate a feeling of being unimportant or unnoticed. Excerpt 7 highlights the interlocutor's dissatisfaction with their experience applying for disability and national pensions, particularly due to the reinitiation of the matter by Kela, the Finnish pensions and social security organisation, without their involvement. The excerpt appears to examine the interplay between mental health, self-awareness, and the complexities of modern communication, particularly in sharing personal information online:

> MHR7: "I applied for a disability pension from Ilmarinen after being ill for 300 days, and at the same time, a national pension application was pending with Kela. Ilmarinen rejected my application, and so did Kela, but without asking me, Kela started this matter again." (Excerpt 7)

In this excerpt, the interlocutor discusses their experience applying for a disability pension and a national pension. They mentioned that after being ill for 300 days, they applied for a disability pension from Ilmarinen, a presumably relevant organisation. However, it is not explicitly stated *whether* this application was accepted or rejected. The interlocutor also mentioned that they have a national pension application pending with Kela, another private organisation that deals with pensions and social security in Finland. It remains unclear from the excerpt whether this application was initially accepted or rejected. The interlocutor expressed frustration because despite both Ilmarinen and Kela rejecting her application(s), Kela reopened the matter without consulting or informing them. This could imply a lack of communication or transparency in the process, as the interlocutor seems surprised by Kela's actions.

Based on Excerpt 8, it appears that citizens are experiencing difficulties within the digital benefit system. The excerpt reflects the psychological costs caused by the digital administrative burden. The interlocutor seems frustrated because they cannot find guidance or advice on what to do next. This situation possibly stems from a situation in which an unemployed job seeker is unable to work, and the system does not have a specific position to accommodate them:

> MHR8: "Yes, you see, these kinds of unreasonably burdensome situations, I would say, they happen constantly. I don't know, that might be the main reason why I always encounter such pitfalls in the system, where even at Kela [the Social Insurance Institution of Finland], no one knows what to advise next. It probably stems from being an unemployed job seeker who is also unfit for work, and since there's no direct category for that in the system….So, you have to adapt, now it's an unemployed person, but they're unfit for work. And what on earth, they've done volunteer work? Weren't they unfit for work? Actually, even now, is this the fourth or fifth time I've applied for a permanent disability pension, and yesterday was the deadline at Kela, the 11 weeks it has to be processed. I had other matters with Kela yesterday. I clicked onto their pages, and they keep you in suspense until the last moment. There's the national pension issue, and it's just, poof, disappeared, and there's nothing about it anywhere." (Excerpt 8)

The digital benefit system poses a few potential implications, as discussed in Excerpt 8. First, there is a lack of support, i.e., the system in question may not provide appropriate support or solutions for individuals in unique situations, such as unemployed job seekers who are unable to work. This situation could leave people feeling

lost and without guidance. Second, the limited options and the absence of a direct position within the system suggest potential limitations or shortcomings in available opportunities. It implies that the system does not account for people with specific circumstances or challenges. Third, frustration and confusion are evident in the interlocutor's use of terms such as "pitfalls" and their expression regarding a lack of advice, highlighting their frustration with the situation. They feel that they are encountering obstacles or difficulties within the system that they cannot navigate on their own. Their bewilderment was strengthened by finding out that their case had disappeared from their list of open cases in OmaKela service (e-service for social welfare services in Finland). The subject position of an insignificant person produced by the digital administrative burden proves, in part, that the promise of enhancing access and efficiency in service delivery of the digital welfare state does not apply to vulnerable people (van Toorn et al., 2024).

4.4. Being Inferior

The interlocutors often pointed out that they view themselves as inferior in digital interactions. The term "inferior person" typically refers to someone perceived as having lesser qualities, abilities, or value compared with others. This perception can be based on various criteria, including social status, intelligence, skills, moral values, or even personal traits. However, it should be noted that labelling an individual as inferior can be highly subjective and often reflects the biases or prejudices of the person making the judgement. Using such labels can foster negative attitudes and discrimination. It is essential to appreciate each person's individuality and unique contributions, recognising that everyone possesses inherent worth regardless of their perceived status or abilities. Compassion, empathy, and understanding are crucial in promoting a more inclusive and respectful view of others.

Excerpt 9 provides insight into the experiences of individuals receiving social assistance, highlighting a complex interplay between financial realities, societal perceptions and personal agency. The excerpt encapsulates the struggles faced by these individuals as they navigate their daily lives under the weight of societal judgement and stigma. It also emphasises the emotional and psychological burden that comes with financial oversight and the ways in which individuals reconcile their needs with others' perceptions. This dynamic invites a broader reflection on how society views and treats those reliant on others:

> MHR9: "As a social assistance client, I've done that sometimes, and I'll probably do it in the future because I have to deliver my account statements to Kela. So, I've withdrawn cash from the ATM when I go to a restaurant to eat a hamburger. Because I've had such a strong feeling like that, I don't want it, it shows on my account statement that I, as a social assistance client, go to Hesburger to eat a hamburger." (Excerpt 9)

Excerpt 9 highlights the learning costs of the digital administrative burden. MHR9 is concerned about how their spending habits, specifically dining out, may reflect poorly on their status as a social assistance client. This indicates a broader societal stigma that equates social assistance with poverty and restricts individuals' freedom to enjoy basic pleasures without judgement. The mention of the requirement to submit account statements to Kela highlights the oversight faced by social assistance clients. This monitoring system can create pressure to justify personal expenditures, leading to a feeling of being constantly scrutinised. The phrase "such a strong feeling like that" suggests an internal conflict. The interlocutor wants to enjoy experiences such as eating out but feels constrained by the social implications of his financial status. This reflects a sense of

guilt or shame associated with relying on social assistance. The act of withdrawing cash for a meal, despite possible judgement, signifies an assertion of personal agency. The interlocutor acknowledges that they might continue these behaviours, indicating a desire to assert normalcy in their life despite the label of being a social assistance client.

Excerpt 9 clearly illustrates how the design has moved towards increased self-service, requiring citizens to provide all necessary information, verify calculations, and present evidence to contest algorithmic decisions. This has shifted the burden of proof, which, in cases of alleged debts, has been described as a form of extortion (Carney, 2019). The interlocutor's digital literacy demonstrates how by switching to cash, they want to prevent the authorities from seeing and collecting information about their daily private life. According to Griffiths (2024), automated systems that impose greater compliance and administrative demands on benefit claimants can undermine the traditional democratic notion that the state is accountable to its citizens, and not vice versa.

Excerpt 10 offers poignant insight into the interlocutor's internal struggles with self-esteem and feelings of inferiority, particularly concerning her understanding of digital technology. The excerpt encapsulates the complexities of self-perception within the context of modern technology and personal struggles. It demonstrates how unfamiliarity with digital interactions can exacerbate feelings of inadequacy and hinder self-esteem. This reflection highlights the emotional and psychological barriers that many individuals encounter when navigating a rapidly evolving digital landscape:

> MHR10: "Then I always feel a little inferior because of not knowing how to do things or having to ask for help, and I feel stupid and like that, when I've had to struggle with self-esteem anyway and feelings of inferiority, weakness…so it somehow amplifies the fact that you don't know or don't understand digital interaction, and you can't familiarise yourself with it, so…" (Excerpt 10)

The interlocutor explicitly states that they "feel a little inferior," suggesting a pervasive sense of inadequacy. This reveals how their lack of knowledge about digital interactions affects their self-perception, exacerbating existing insecurities. The act of asking for help is portrayed as a source of embarrassment, as the interlocutor feels "stupid" for not knowing how to navigate digital spaces. This highlights a fear of judgement or criticism from others, which often serves as a barrier to seeking assistance. The mention of struggling with self-esteem reflects deeper psychological issues. The interplay between feeling weak and not understanding technology contributes to a cycle of negative self-assessment, in which one issue compounds the other.

The struggle to familiarise oneself with digital interactions may represent broader societal shifts towards technology in which those lacking the necessary skills can feel increasingly left behind. The interlocutor's acknowledgment of this disconnect suggests a feeling of isolation in a tech-driven world. The phrase "somehow amplifies the fact" indicates that the interlocutor's existing struggles with digital literacy, combined with an already-complicated web of emotional challenges, can magnify feelings of inadequacy. The excerpt's tone conveys a mix of frustration and resignation. There is a sense of defeat in acknowledging one's limitations while wishing for understanding and improvement. The repetition of negative self-descriptors such as "inferiority" and "weakness" intensifies the emotional weight, revealing these feelings' profound impact on the interviewee's daily life.

5. Discussion and Conclusions

Digital citizen–state encounters have become important sites for enacting citizenship and living out social sustainability, particularly for those who rely more on public services or benefits. This article has addressed an underexamined aspect of digital administrative burdens and their costs in citizen–state encounters, particularly regarding their implications for people with mental illness. The mental health rehabilitees struggled with problems of digital inclusion, problems with transparency in digital and bureaucratic processes, and lack of support. Mental health rehabilitees' digital proficiency varied. We investigated how people with mental illness experience digital administrative burdens and how these experiences produce socially exclusive identities. By analysing excerpts from discussions, we demonstrated how digital citizen–state encounters, particularly when claiming welfare benefits, create subject positions of feeling dispossessed, unreliable, insignificant, and inferior among mental health rehabilitees—qualities that shape how rehabilitees define themselves as citizens. This illustrates how digital administrative burdens in digital citizen–state encounters create or affirm identities, resulting in social exclusion.

The rise of automated systems and self-transactions in digitalised public services has included the promise of providing services more efficiently, with more transparent, value-neutral, impartial, and fair decision-making (Bovens & Zouridis, 2002; Casey, 2022; Wirtz et al., 2019). However, our research results do not support this promise from the perspective of vulnerable people. In a socially sustainable digital welfare state, algorithmic systems promote social equity, fairness, and well-being, and are designed to address social challenges in particular, such as inequality, poverty, and social exclusion. Our research results indicate that digital public services are not socially sustainable for mental health rehabilitees even though public services are associated with the social consensus that certain basic services should be available to all, regardless of income, physical ability, or mental capacity. For example, poverty creates exclusion because vulnerable people rarely can afford to acquire and maintain the digital tools needed to apply for financial benefits in the digital welfare state.

Mental health rehabilitees cited lack of face-to-face interaction as a problem with digital citizen–state encounters, as it made the digital welfare system appear onerous. Mental rehabilitees have expectations—such as confidentiality, reciprocity, and predictability—from citizen–state encounters. These expectations, which they carry over from face-to-face to digital citizen–state encounters, are often unmet by digital platform procedures. Extant research on successful face-to-face encounters between mental health rehabilitees and authorities in different Scandinavian countries indicates that positive experiences correlate with feelings of confidence and security in interactions between mental rehabilitees and professionals. These experiences are also linked to the continuity of the process and the ability to foresee future steps, the ability to build trust in the relationship, professionals' responsiveness to individual needs, and treatment of rehabilitees as unique individuals, rather than mere users of mental health services (Nouf & Ineland, 2023). The participants in the group discussions repeatedly highlighted the emotional impact of digital administrative burdens.

Mental health rehabilitees have experienced frustration and disappointment due to a lack of trust and faith in their integrity. They feel that their privacy is being invaded when they are constantly monitored or evaluated. They also feel disappointment and stress due to a lack of confidentiality and boundaries between the individual and the aid agency. They found claiming welfare benefits to be a repetitive and

time-consuming task that adds stress to their lives. They also experienced uncertainty about the outcome of the application process, indicating a lack of control over their situation and a sense of vigilance or caution. These experiences produce a sense of being dehumanised and doubted by society, contributing to an overall lack of trust in the decision-making process and society, which should care for people in vulnerable positions.

Digital welfare state information systems might be overly complicated or not user-friendly, causing frustration for individuals who already struggle with cognitive functioning or focus. They may be automated systems that do not provide adequate human interaction, leaving individuals feeling isolated, particularly if they need personalised assistance for their financial or mental needs. There is evidence that a lack of support when using digital services can trigger existing social distrust and revive memories of negative experiences that were not originally caused by digital services (Andersen et al., 2020). The mental health rehabilitees who participated in the group discussions often cited heightened concerns about data privacy, fearing that sensitive information could be misused or lead to stigmatisation. Generic or robotic responses to enquiries are distressing for them, leading to further disengagement from essential services.

The pressures of poverty exacerbate mental health conditions, making it even harder for mental health rehabilitees to use digital tools. Improving digital citizen–state encounters for people with mental illness involves addressing these challenges through better access, tailored communication, and supportive infrastructures. Most participants in the group discussions viewed themselves as somehow irregular and exceptional cases, i.e., automated systems did not provide enough human discretion and professional help to meet their needs. As demonstrated, digital services have difficulties reaching out to mental rehabilitees who are in the worst and most complicated situations (Virtanen et al., 2021). Our results suggest that digital public services and automated systems are unable to correct existing problems of exclusion in society or the underlying causes of distrust between citizens and the state. Instead, they tend to reproduce these issues in digital form or, at worst, exacerbate the problems further.

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Data Availability

The research data used in this study is not available to other researchers due to ethics and confidentiality issues.

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