

The effects of disability and caregiving on work and perceptions of economic insecurity in Sweden, Italy, Germany, and the UK

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ABSTRACT

Disability is associated with a range of structural disadvantages facing individuals and households alike. Drawing from a recent online cross-national survey of Germany, Italy, Sweden, and the UK, we explore the relationships between disability, caregiving, employment, and perceived economic insecurity. We examine whether having a household member with disabilities increases the likelihood of caregiving, and whether both disability and caregiving shape employment outcomes as well as perceptions of economic insecurity. In addition to finding that people with disabilities are less likely to work, we also find that individuals living in households with a disabled member are significantly more likely to engage in caregiving activities, which contributes to reduced employment. As a result, households that included a member with a disability tended to experience greater economic insecurity. We also find that instances of providing care and perceptions of economic insecurity are comparatively greater in Italy. Together, these findings point to important family and caregiving dynamics and their relationship to work and feelings of economic security in different policy contexts.

KEYWORDS Care; employment; economic insecurity; disability; cross-national; households

Introduction

Across the European Union, approximately 24% of individuals age 16 and older reported a disability-related limitation in 2024, but rates varied considerably across countries (Eurostat, 2025). In Sweden, 22% of the population reported

a disability in 2024. The corresponding percentages in the UK, Italy, and Germany were 27%, 15%, and 28%. Many of these individuals require care, with an estimated one-third of Europeans providing informal intensive care (Verbakel *et al.*, 2017). An informal care worker can spend 10 to 20 hours per week or more providing care (ENNHRI, 2017).

Numerous policies directly or indirectly support people with disabilities and caregivers. In England, carers' allowance and credits have been implemented to assist unpaid caregiving in households with disabled members (Taylor, Vseteckaova and Wainwright, 2025). The Italian state includes legislation that recognizes informal care and provides vouchers to help alleviate costs in addition to other social allowances (Mezzasoma, 2025) and efforts to support caregivers who must work fewer hours in paid labor (Petrini *et al.*, 2019). In Germany, numerous long-term care policies led to the creation of care support allowances and leave of absence policies for caregivers (Reinhard, 2018). In Sweden, changes to the Social Services Act recognizing the role of informal caregivers expanded to include caregiving to anyone in the household, and not just older people, by way of monthly allowances and increased access to social services (Johansson and Sundström, 2006).

Such policies are possible because states have recognized the extensive economic impacts of disabilities on both individuals and families (Stabile and Allin, 2012; Maroto and Pettinicchio, 2020). There are direct costs as household members with disabilities may not be employed or working few hours in low-paying jobs (Addabbo, Krishnakumar and Sarti, 2014; Bouchet, Maroto and Pettinicchio, 2026). Other direct costs include paying for health care and other adjacent services, transportation, and caregiving (She and Livermore, 2007; Morris and Zaidi, 2020). These expenses often require considerable income to offset (Roddy, 2022). Disability may also lead to indirect costs and income penalties when household members provide unpaid care to people with disabilities within their households, limiting their participation in paid work and decreasing overall household income and savings (She and Livermore, 2007; McKnight, 2014; Petrini *et al.*, 2019; Calegari, Fabrizi and Mussida, 2022). Despite policies meant to alleviate economic disadvantage, variation in the generosity of these policies, along with uneven implementation, deregulation, decentralization, and austerity measures, are thought to mitigate the positive effects of these interventions (see Polverini *et al.*, 2004; Johansson, Long and Parker, 2011; Nicoricu and Elliot, 2023).

Households may therefore be at a higher risk of financial hardship especially if they struggle to find other sources of economic support, including government benefits (Parish, Roderick and Swaine, 2010; Maroto, 2016; Maroto and Pettinicchio, 2020; Balbo and Bolano, 2024). In turn, barriers and disadvantages

experienced by both people with disabilities and caregivers may be linked to negative perceptions of economic security (Earle and Heymann, 2012; Choi, Carr and Namkung, 2022; Maroto and Pettinicchio, 2023a). Perceptions of economic insecurity capture subjective beliefs about current and future financial situations as they relate to vulnerability, exposure to risk, and positionality (Western *et al.*, 2012; Hacker *et al.*, 2014; Chung and Mau, 2014). These perceptions are associated with increasing job precarity, rising costs of living, and the loss of social safety nets across countries (Mau, Mewes and Schöneck, 2012; Akaeda and Schöneck, 2022), factors that many people with disabilities and caregivers are often exposed to.

Findings from various studies provide some understanding of the disadvantages disability and care have on individual and household economic well-being across different countries (Mitra *et al.*, 2017; Riffin *et al.*, 2019). Research also illustrates how other factors shape care dynamics, and how care, work, disability, and economic insecurity are shaped by government policies and public supports (Petrini *et al.*, 2019; Mussida and Patimo, 2021; Hadjar and Kotitschke, 2021; Balbo and Bolano, 2024). We draw from this research to address the following questions:

Does having a disability or living with another person with disabilities influence employment outcomes, and how does caregiving affect this relationship?

How do disability, caregiving responsibilities, and employment situations affect perceptions of economic insecurity?

We study the direct and indirect effects of disability on individuals and households by considering potential economic barriers facing households that include members with disabilities and where household members may also be providing care to other members within their households. We use new quota-based cross-sectional online survey data ($N = 802$) gathered across four countries—Sweden, Italy, the UK, and Germany—that include households with and without disabilities and where members may be providing different types of care to study relationships between disability, caregiving, employment, and perceptions of economic insecurity. We examine these survey data in a cross-national context as each country reflects potentially different cultural expectations and institutional arrangements when it comes to disability, work, and care.

Disability, work, and perceptions of economic insecurity

Cross-nationally, interconnected policies targeting disability-based unemployment and underemployment have included antidiscrimination laws that try to make the labor market more equal (Bunt *et al.*, 2020) as well labor standards that

support part-time and flexible work arrangements so more people with disabilities can stay employed (Vedeler and Anvik, 2020; Bouchet, Maroto and Pettinicchio, 2026). They have also included welfare policies meant to close economic gaps between people with and without disabilities by supporting both individuals with disabilities and their households (van der Zwan and de Beer, 2021).

Despite these policies, people with disabilities still face labor market barriers and meager aid (Anxo *et al.*, 2007; Corby, William and Richard, 2018; Pettinicchio, Maroto and Brooks, 2022). Quota-based systems (Bertrand, Caradec and Eideliman, 2014; Cohu, Lequet-Slama and Velche, 2005; Agovino, Garofalo and Marchesano, 2018), policies encouraging disabled people to work at reduced hours (see Agovino and Rapposelli, 2017), and policies focusing more on getting people with disabilities into any kind of work rather than the quality of work and related earnings disparities (Corby, William and Richard, 2018; Efimov *et al.*, 2022) have not addressed more deeply entrenched dimensions of inequality and disadvantage. These dimensions can include widespread negative attitudes about disability, often referred to as disablism (Wolbring, 2008; Campbell, 2009), as well as structural processes and practices that produce and maintain inequality, sometimes referred to as ableism or institutional ableism (Bogart and Dunn, 2019; Maroto and Pettinicchio, 2023b). These attitudinal and structural barriers create challenges for disabled people when it comes to work, wages, savings, accessing government benefits, and higher expenses related to health care and personal care (Mitra *et al.*, 2017; Jones, Davies and Drinkwater, 2018; Unger, 2002; Maroto, Pettinicchio and Patterson, 2019; Pettinicchio and Maroto, 2017; Pettinicchio, Maroto and Brooks, 2022; Bouchet, Maroto and Pettinicchio, 2026).

Congruent with existing research on perceptions of economic insecurity in Europe more broadly, people with disabilities often experience greater insecurity owing to employment barriers and limited access to government supports. Using data from the European Values Survey across 19 European countries, Mau, Mewes and Schöneck (2012) found that welfare state efforts not only influence objective financial well-being but also shape subjective feelings of economic insecurity. Nearly a decade later, based on data across 27 European countries, Cantó, García-Pérez and Romaguera-de-la-Cruz (2020) found that in addition to employment situations, household responsibilities (including the provision of care) and the generosity of welfare policies shape how people perceive their insecurity. These studies provide important insights on aspects contributing to economic insecurity like work and government supports, two key factors inherently tied to disability and caregiving.

Research has also explored the nature of perceptions of economic insecurity following economic crises, such as the 2008 Great Recession and the COVID-19

pandemic. Beyond objective economic situations of individuals and households in Europe, Akaeda and Schöneck (2022) found that feelings of insecurity varied by a country's economic health and welfare system strength, where individuals in Scandinavian countries reported lower levels of feeling insecure. And, using self-assessments about their financial position in relation to paying bills, housing payments, and managing household finances, Emerson *et al.* (2021) found that following the pandemic, people with disabilities in the UK were disproportionately exposed to financial stressors including lack of work or work hours, which increased feelings of economic insecurity.

These studies show how individual material conditions and larger economic and social factors shape feelings of insecurity. People with disabilities often experience greater economic insecurity in relation to their lower employment levels and limited access to supports. However, these factors also extend to caregivers for people with disabilities, who may encounter additional institutional barriers that can shape economic outcomes and perceptions of economic insecurity.

The structural challenges of caregiving

Ableism shapes life outcomes for individuals with disabilities and its effects extend to other household members as well. While people with disabilities often face ableism in accessing employment and other economic resources, caregivers experience institutional ableism through inadequate support from the welfare state, including insufficient funding for care services, inadequate care training, and a lack of recognition for the value of caregiving work (Costa-Font and Vilaplana-Prieto, 2025). Caregivers may also experience ableism in the form of stigma and blame for not being able to provide adequate care, or for seeking government support (Morgan and Zippel, 2003; Zwar *et al.*, 2021).

Caregivers face dual barriers. With shortages in, and the high costs of, paid professional care workers, many individuals and especially women leave paid work to fulfill caregiving roles, reducing their earnings (Pickard *et al.*, 2015; Verbakel *et al.*, 2017; Eurofound, 2023). Indeed, much has been said about the “disability penalty” on households that is often tied to costs associated with disability and the loss of income owing to challenges in finding and maintaining good-paying jobs (Van Houtven, Coe and Skira, 2013). Households with disabilities incur both general costs, such as those related to health care and food, and disability-specific costs, including assistive devices, rehabilitation, personal assistance, and home adaptations (Mitra *et al.*, 2017).

In addition to the severity of disability, household structure, age, and varying cultural expectations about caregiving, the balancing act caregivers perform between caregiving and paid labor is also a function of different workplace policies

and public supports (Mitra *et al.*, 2017; Petrini *et al.*, 2019). The impact of caregiving is far-reaching and includes challenges around work-life balance and financial well-being (Bremmers *et al.*, 2022). The disability and caregiving dynamic is both shaped by and shapes households, varying by the kinds of government supports people with disabilities and caregivers can access (Ruppanner and Bostean, 2014). Ableism speaks to how attitudes and structures can limit these resources for people with disabilities and their households alike (Albert and Powell, 2022). Devaluation of both disability and caregiving and challenges in accessing work and government supports often jointly contribute to perceptions of insecurity.

Caring for a household member with disabilities

Disability in the household increases the chances that another household member will need to fill an unpaid caregiving role (ENNHRI, 2017). As Shandra *et al.* (2012, p. 241) point out, “Disability is a household affair.” The nature of the care receiver’s disability and their care needs affect the willingness and ability of a household member to provide care. For instance, higher care burdens tend to be associated with activities of daily living like bathing and cooking, medication management, and coordinating medical appointments (Riffin *et al.*, 2019). More broadly, household structures and the relationship between the caregiver and the care recipient (e.g., couple households or the presence of extended family) further affect how care might be jointly provided by partners or extended family members who share caregiving roles (Olsson and Hwang, 2003; Henz, 2006). Caring for a spouse versus a child comes with different role expectations, emotional dynamics, and different support structures. Employers may better tolerate parents of children with disabilities missing work because of their child’s needs (Brandon, 2000), compared with those who provide care to adult household members (Gray and Hughes, 2005), again pointing to societal attitudes and practices that present barriers for many caregivers and families with disabilities.

Much research on informal care points to its gendered nature (Wasi, van den Berg and Buchmueller, 2012). Across Europe, women are expected to participate in the labor market in addition to providing informal care especially for their children, with Nordic countries seeing smaller proportions of women providing intensive informal care, and higher proportions in Southern Europe (Verbakel *et al.*, 2017). In their Italian study, Calegari, Fabrizi and Mussida (2022) find that women face greater challenges in balancing work and caregiving in households with disabled members. Given different caregiving expectations and fewer opportunities to hire formal caregivers in Italy (Albertini and Pavolini, 2017), Mussida and Sciulli (2019) find that women in Italy face reduced employment

when providing care compared with countries like the UK. They suggest that this is in part because family and employment benefits allow caregivers to continue to work in the UK but not in Italy. Although Italy does provide fixed cash allowances to hire paid caregivers (often migrant women; see Da Roit, Gonzalez Ferrer and Moreno-Fuentes, 2013), these are generally insufficient in covering caregiving costs (Da Roit and Le Bihan, 2011).

In sum, the presence of disability within a household can affect the dynamics of caregiving, with research pointing to distinct challenges experienced by caregivers based on the nature of disability, household structure, gender, economic situations, and access to government supports. Informal caregiving is closely linked to labor market outcomes and earnings, pointing to certain challenges in navigating paid work and informal care roles.

Caregiving, labor market participation, and earnings

Informal unpaid caregiving often occurs in conjunction with paid employment in the regular labor market. To avoid economic penalties, caregivers may seek out more flexible work arrangements, including part-time work. But while the contingent labor market may offer flexibility, part-time work is also associated with lower earnings and economic precarity (Maestripieri, Palomera and Rizza, 2023; Jette and Badley, 2000; Pettinicchio and Maroto, 2024; Bouchet, Maroto and Pettinicchio, 2026). Additionally, disability care needs, shared caregiver roles in the household, and the availability of paid care options and public supports can either facilitate or constrain whether informal care leads to the loss or reduction in paid work (Brown and Clark, 2017; Ehrlich, 2023). Given variation in experiences with the factors listed above, as Henz (2006) explains, providing care may lead to reduced work, but need not always have to.

Having a child with disabilities affects the labor market decisions of parents (Jakobsson, Kotsadam and Szebehely, 2013). In some contexts, employment probabilities of both mothers and fathers of children with disabilities are about the same (Brekke and Nadim, 2016). Mussida and Patimo (2021) find that while negative effects on employment were stronger for women, the presence of children with disabilities in the household had a greater impact on men's employment. Nonetheless, women are already more likely to exit paid labor for extended periods to raise children compared with men (Budig and England, 2001; Morgan and Zippel, 2003), and these societal expectations may also shape the specific considerations around work and caregiving to children with disabilities (Stabile and Allin, 2012; Tröndle, Pfahl and Traue, 2024). Juggling the specific needs of disabled children with work, and the unavailability of childcare, especially for single mothers, may lead women who are already in

economically precarious situations to leave paid work, losing their primary source of income (Brandon, 2000).

Obstacles in accessing the labor market can lead to lower earnings, but this varies based on whether a person cares for an adult or a child with disabilities. Some studies find that caring for a disabled child is more likely to reduce earnings than caring for an adult with disabilities. For example, in addition to higher out-of-pocket expenses for families with special needs children, Earle and Heymann (2012) find that workers who have a child with special needs were more likely to have lost income or wages than those caring for an older adult or disabled family member. Roddy (2022) finds that families with a child with disabilities experience particular financial challenges, including reduced household income and a lower standard of living.

Other studies highlight the unique experiences of caregivers for adults with disabilities. Calegari, Fabrizi and Mussida (2022) find that in Italy, providing care to a disabled child does not significantly affect paid work intensity, but caring for a partner with disabilities does. The authors suggest this is because there are other care options available for children with disabilities like school programs and formal childcare. Caregiving partners, rather, may struggle to find adequate external supports. Similarly, in their study of care provision to adults among German households, Vonneilich, Lüdecke and Kofahl (2016) show how caregiving responsibilities negatively shape households especially when caregiving affects household finances, which can in turn account for feelings of economic insecurity.

Disability, caregiving, and perceptions of economic insecurity

Subjective feelings of economic insecurity are shaped by individuals' and households' abilities to balance income and spending, and the kinds of precarity they may experience (Hacker *et al.*, 2014; Maroto and Pettinicchio, 2023a). Because household structure is related to employment income, household savings, and access to government benefits, it also influences feelings of economic insecurity (Spilerman, 2000; Maroto and Pettinicchio, 2023a; Maroto, Pettinicchio and Patterson, 2019). Households with two adults present tend to be more economically secure than single individuals (Lupton and Smith, 2003; Zagorsky, 2005; Ozawa and Lee, 2006; Mitra *et al.*, 2017). Similarly, having extended family members in the household may improve feelings of security if they contribute to household finances, but not if they do not contribute and consume household resources (Pettinicchio and Maroto, 2017). These household contexts in turn shape how individuals in families with and without disabilities perceive their financial security.

Numerous studies have shown the broad connection between objective household economic conditions and feelings of financial insecurity especially as these relate to the generosity of social safety nets (Mau, Mewes and Schöneck, 2012; Cantó, García-Pérez and Romaguera-de-la-Cruz, 2020). Studies specifically on disability have also pointed to similar considerations (Akaeda and Schöneck, 2022; Emerson *et al.*, 2021). For example, Autor *et al.* (2019) find that government disability benefits seem to matter less in dual-earner households where one earner is offsetting the cost of other members not being able to work. Thus, the interplay between household economic situations and access to public supports shapes how secure or insecure individuals and families feel.

People with disabilities tend to have stronger feelings of economic insecurity than people without disabilities (Emerson *et al.*, 2021; Maroto and Pettinicchio, 2023a). However, perceptions of economic insecurity extend to entire households when households include a member with disabilities (She and Livermore, 2007). A household member with disabilities encounters income penalties, savings losses, and credit barriers, contributing less to the household's wealth, an important aspect shaping feelings of insecurity (Chung and Mau, 2014). Additionally, costs associated with disability, coupled with caregiving duties that may limit other family members from earning income, can deplete household savings and result in significant debt, which further contributes to perceptions of economic insecurity (Batavia and Beaulaurier, 2001; McKnight, 2014).

Disability not only increases financial instability for the individual experiencing disability, but also constrains the options available to other household members, regardless of whether they themselves have disabilities (Batavia and Beaulaurier, 2001; Parish, Roderick and Swaine, 2010; McKnight, 2014; Erickson, Lee and von Schrader, 2015; Balbo and Bolano, 2024). Out-of-pocket expenses and access to resources meant to alleviate economic insecurity associated with disability and caregiving vary cross-nationally, suggesting that feelings of insecurity are also shaped by the kinds of government supports individuals and households can access (Mitra *et al.*, 2017; Maroto and Pettinicchio, 2023a).

Social policies can mitigate economic precarity among households with disabilities through a range of interventions that include disability and unemployment benefits, access to health care and social services, workplace policies that help disabled people gain entry to labor markets and maintain employment, and flexibility at work that could also help household members providing care (Peng, 2010). Germany, Sweden, Italy, and the UK have implemented numerous policies to alleviate economic precarity such as caregiver allowances, credits, vouchers, and leaves of absence to support unpaid caregivers and lessen the costs associated with caring for individuals with disabilities.

Research on welfare states offers some insight into how variation in disability and caregiving policies can influence feelings of economic insecurity as well as why these policies have seen mixed results in staving off insecurity (Jones, Davies and Drinkwater, 2018). For instance, social-democratic systems, like that of Sweden, provide more extensive supports for households and for individuals with disabilities than liberal regimes like the UK and corporatist systems like that of Germany and Italy (Autor *et al.*, 2019; Hadjar and Kotitschke, 2021). However, even the most generous systems have undertaken austerity measures in recent years (Hacker, 2006). Sweden has tightened eligibility criteria for personal support services and redefined basic needs more narrowly, forcing families to cover caregiving costs (Norberg, 2022). Italy too has seen policies shift towards more privatization of social welfare, which has increased burdens on Italian households, placing many in the “zone of vulnerability” (Siza, 2022). In the UK, social policies have shifted care responsibilities onto households, placing greater financial burdens on caregivers (Macdonald and Morgan, 2020).

Overall, increasing restrictions may mean that supports do not adequately accommodate the economic needs of families with disabilities, thereby increasing their financial precarity and perceptions of insecurity (Albert and Powell, 2022). As Mitra and colleagues (2017) explain, countries that lack robust policies meant to alleviate economic hardships make the relative costs of disability higher than among welfare states that offer more generous programs. The inability of both individuals and households to mobilize government resources therefore may worsen economic conditions and increase perceptions of economic insecurity.

Materials and methods

We address our research questions using data from the 2024 European Survey of Disability and Caregiving in Households, a quota-based online survey collected from respondents in Germany, Italy, Sweden, and the United Kingdom from November 5 to 11, 2024, with the help of Qualtrics, a survey research firm. The survey was provided in English, German, Italian, and Swedish to Qualtrics’s respondent panels in each of the four countries. We used quota-based sampling to stratify the sample by country and to target respondents across two key variables: individual disability status and household member disability status. As a result, half of the sample within each country (approximately 100 cases per country) included a respondent with a disability, a respondent living with a household member with a disability, or both. The final sample included 802 respondents, evenly represented across the four countries and across household disability status. Oversampling was necessary to ensure an adequate number of households with a person with disabilities were included. To make the model

results more generalizable across the population, we employ post-stratification sampling weights that account for the representation of people with disabilities in each country and the country's relative population.

Table 1 presents descriptive statistics for key model variables. We focus on two outcome variables across a series of models. Our first outcome variable is employment status with three categories: employed full-time, employed part-time, and not working. Most respondents were employed full-time at the time of the survey. The second outcome variable, difficulty in meeting expenses, captures aspects of economic insecurity with three categories of very easy, somewhat easy, and somewhat or very hard to meet expenses in the past month. In total, 41% of respondents reported that it was somewhat or very hard to meet their expenses recently.

We examine three key predictor variables linked to household disability status. Any disability indicates whether the respondent reported having any disability. Household member with any disability indicates whether the respondent reported having a household member with any disability. Disabilities include the following: difficulty seeing even when wearing glasses or contact lenses; difficulty hearing even when using a hearing aid; difficulty walking, using stairs, using your hands or fingers, or doing other physical activities; difficulty learning, remembering, or concentrating; emotional, psychological, or mental health conditions; or any other long-term condition lasting more than 6 months. Overall, 50% of respondents reported disabilities, as targeted by the survey in data collection, and 20% reported living with a household member with disabilities. Among those with household members with disabilities, 26% of these were children.

The third variable, caregiving for household member, indicates whether the respondent provides any type of caregiving for another member of their household. Caregiving includes preparing meals, helping with everyday housework or heavy household chores, providing transportation to appointments or for running errands, looking after personal finances, and providing personal care, basic medical care, or help moving inside their residence. As shown in Table 1, approximately 14% of respondents provided some type of care for a household member. Providing care was much more common among respondents who lived with a person with disabilities; 34.7% of these respondents provided care.

Across models, we control for a set of variables linked to household structure and family dynamics. These include the respondent's gender, measured as male or female; an indicator for whether the respondent has any children; and a categorical variable for marital status, measured as married/cohabiting or not married, which includes single, never married, and formerly married (widowed, separated, or divorced) individuals. We account for education level, which is a categorical variable that indicates whether the respondent obtained a bachelor's

Table 1. Descriptive statistics for sample.

	Full sample		With a disability (self)		With a disability (household)		Provided caregiving for family member	
	Freq.	Prop.	Freq.	Prop.	Freq.	Prop.	Freq.	Prop.
Any disability (self)								
No	442	0.550			36	0.224	53	0.469
Yes	360	0.449			125	0.776	60	0.531
Any disability (household)								
No	642	0.800	235	0.653			60	0.531
Yes	161	0.200	125	0.347			53	0.469
Any caregiving (for household member)								
No	689	0.859	300	0.833	108	0.671		
Yes	113	0.141	60	0.167	53	0.329		
Employment situation								
Employed full-time	424	0.529	168	0.467	80	0.497	64	0.566
Employed part-time	129	0.161	68	0.189	33	0.205	18	0.159
Not working	249	0.310	124	0.344	48	0.298	31	0.274
Difficulty in meeting expenses								
Very easy	153	0.191	44	0.122	22	0.137	21	0.186
Somewhat easy	319	0.398	137	0.381	60	0.373	43	0.381
Somewhat or very hard	330	0.411	179	0.497	79	0.491	49	0.434
Age (mean)		47.571		45.578		43.689		41.513
Age (median)		48.000		45.500		42.000		41.000
Gender								
Female	394	0.491	196	0.544	89	0.553	54	0.478
Male	408	0.509	164	0.456	72	0.447	59	0.522

(Continued)

Table 1. Continued.

	Full sample		With a disability (self)		With a disability (household)		Provided caregiving for family member	
	Freq.	Prop.	Freq.	Prop.	Freq.	Prop.	Freq.	Prop.
Education								
Below a bachelor's degree	521	0.650	242	0.672	113	0.702	64	0.566
Bachelor's degree or higher	281	0.350	118	0.328	48	0.298	49	0.434
Any children								
No	521	0.650	223	0.619	90	0.559	43	0.381
Yes	281	0.350	137	0.381	71	0.441	70	0.619
Marital status								
Married or cohabiting	439	0.547	184	0.511	96	0.596	73	0.646
Never or formerly married	363	0.453	176	0.489	65	0.404	40	0.354
Country								
Sweden	200	0.249	91	0.253	43	0.267	23	0.204
Italy	199	0.248	80	0.222	52	0.323	50	0.442
Germany	203	0.253	101	0.281	35	0.217	13	0.115
United Kingdom	200	0.249	88	0.244	31	0.193	27	0.239
Total	802		360		161		113	

Source: 2024 European Survey of Disability and Caregiving; N = 802.

Notes: Estimates provided as frequencies (freq.) and proportions (prop.), unless indicated otherwise. Estimates are unweighted.

degree or equivalent, including tertiary education. Finally, we also account for country of residence with a categorical variable.

Although the data are structured to include an overrepresentation of people with disabilities and a balanced sample across countries, examining other variables across the four countries shows that the data are largely representative of the population in relation to education, employment, age, and gender (see Appendix Table A1). Within our sample, 69% of respondents were employed, 35% had at least a bachelor's degree, gender was evenly distributed, and the median age was 48 years old.

We use a series of multinomial logit regression models to estimate relationships with our outcome variables.¹ For categorical outcomes, such as employment status and difficulty meeting expenses, these models estimate the probability of membership in each category compared with the probability of membership in a designated reference category (Liao, 1994; Menard, 2002). For all models, we report our results as average marginal effects, which can be interpreted as a percentage point change in the probability of the outcome category associated with a unit change in the predictor variable. In some cases, we also discuss results as predicted probabilities to further illustrate our findings.

Results

Employment

As shown in Table 2, which presents results from a multinomial logistic regression examining three categories of employment status, individuals with disabilities were less likely to be in full-time employment by 12.7 percentage points and more likely to be not working by 8.8 percentage points.

Living with individuals with disabilities and engaging in caregiving activities were not significantly associated with employment status. This suggests, as other studies do (e.g., Henz, 2006; Brown and Clark, 2017; Verbakel *et al.*, 2017; Ehrlich, 2023), that disability in the household and caregiving need not always negatively influence employment outcomes. We do find that other factors, including education, gender, and the presence of children, and potentially, the nature of social and welfare state policies, tended to play a role in predicting employment status. Men were 19.8 percentage points more likely to be in full-time

¹ Ordered logistic regression models are another alternative for analyzing categorical data, but these tend to be more restrictive because the models also assume that the relationship between each pair of outcomes is the same (proportional odds or parallel regression assumption). A Brant test showed that our data violated this assumption. Ordered logistic regression results are available in the appendix.

Table 2. Results from multinomial logistic regression model predicting employment status.

	Employed full-time		Employed part-time		Not working	
	AME	SE	AME	SE	AME	SE
Household member with disability	-.023	(.057)	.012	(.042)	.011	(.052)
Self with disability	-.127***	(.036)	.039	(.030)	.088*	(.034)
Provide any care	-.076	(.057)	-.023	(.042)	.099	(.055)
Age	-.009***	(.001)	-.001	(.001)	.010***	(.001)
Male	.198***	(.037)	-.123***	(.032)	-.075*	(.035)
Bachelor's degree or higher	.089*	(.039)	.030	(.034)	-.119**	(.037)
Any children	.187***	(.044)	-.023	(.032)	-.164***	(.043)
Married or cohabiting	.087*	(.038)	-.033	(.032)	-.053	(.035)
Country (Ref: Sweden)						
Italy	-.120*	(.051)	.049	(.036)	.071	(.048)
Germany	-.134**	(.045)	.057	(.033)	.077	(.041)
United Kingdom	-.216***	(.048)	.079*	(.036)	.138**	(.047)
Pseudo R ²	.191		.191		.191	

*** $p < .001$, ** $p < .01$, * $p < .05$.

Source: 2024 European Survey of Disability and Caregiving; $N = 802$.

Notes: Multinomial logistic regression models predicting probability of three categories of employment. Continuous variables are mean centered. AME refers to average marginal effects, which can be interpreted as a percentage point change in the probability of the outcome category associated with a unit change in the predictor variable. Standard errors are in parentheses. Estimates weighted for representativeness by country and disability status.

employment than women, and they were 12.3 percentage points less likely to be in part-time work. Individuals with children were also more likely to be in full-time employment by 18.7 percentage points, highlighting how many engage in work and caregiving for children at the same time. In addition, individuals living in Sweden were more likely than those living in Italy, Germany, and the UK to be in full-time employment. Variation in employment rates might point to how more generous welfare states also allow individuals to remain in paid labor despite other household roles and responsibilities (Ruppanner and Bostean, 2014; Akaeda and Schöneck, 2022; Hadjar and Kotitschke, 2021; Norberg, 2022).

Respondents living with a person with disabilities were much more likely to engage in caregiving (model results presented in Table A2), suggesting that presence of disability in the household and providing care might interact. In addition to living with someone with disabilities, having children in the household was the other major factor associated with caregiving.

Table 3 expands on these results to examine whether the relationship between household member disability status and employment changes after considering caregiving responsibilities by interacting these terms in the model. Compared with situations where a respondent does not live with a household member with disabilities and is not providing care, individuals providing care to a household

Table 3. Results from multinomial logistic regression model predicting employment status with interactions between care and household member disability.

	Employed full-time		Employed part-time		Not working	
	AME	SE	AME	SE	AME	SE
Household member disability care (Ref: No disability, no care)						
Disability, no care	.005	(.066)	.043	(.051)	-.048	(.059)
Care, no disability	-.038	(.075)	.021	(.060)	.017	(.075)
Disability and care	-.133	(.074)	-.052	(.045)	.185**	(.068)
Self with disability	-.131***	(.036)	.035	(.030)	.096**	(.034)
Age	-.009***	(.001)	-.001	(.001)	.010***	(.001)
Male	.200***	(.037)	-.122***	(.032)	-.078*	(.034)
Bachelor's degree or higher	.089*	(.039)	.029	(.034)	-.118**	(.037)
Any children	.185***	(.045)	-.025	(.032)	-.159***	(.044)
Married or cohabiting	.085*	(.038)	-.036	(.032)	-.049	(.035)
Country (Ref: Sweden)						
Italy	-.121*	(.051)	.047	(.036)	.074	(.048)
Germany	-.134**	(.045)	.057	(.033)	.076	(.041)
United Kingdom	-.213***	(.049)	.084*	(.036)	.129**	(.048)
Pseudo R^2	.194		.194		.194	

*** $p < .001$, ** $p < .01$, * $p < .05$.

Source: 2024 European Survey of Disability and Caregiving; $N = 802$.

Notes: Multinomial logistic regression models predicting probability of three categories of employment. Continuous variables are mean centered. AME refers to average marginal effects, which can be interpreted as a percentage point change in the probability of the outcome category associated with a unit change in the predictor variable. Standard errors are in parentheses. Estimates weighted for representativeness by country and disability status.

member with disabilities were 18.5 percentage points more likely to not be working, net of covariates. These results show that while living with a disabled household member and providing care on their own do not necessarily influence work outcomes, the specific provision of care to a disabled household member does. This is in line with much research in the field (e.g., Jakobsson, Kotsadam and Szehely, 2013; Brekke and Nadim, 2016; Calegari, Fabrizi and Mussida, 2022).

Difficulty meeting expenses

Table 4 presents the results from models predicting whether respondents experienced difficulties in meeting expenses. Net of controls, having a disability was significantly associated with a respondent's ability to meet their monthly expenses, but living with someone with disabilities was not. Respondents with disabilities were 11.2 percentage points less likely to report that it was very easy to meet expenses and 13.2 percentage points more likely to report that it was

Table 4. Results from multinomial logistic regression model predicting economic insecurity.

	Very easy		Somewhat easy		Somewhat or very hard	
	AME	SE	AME	SE	AME	SE
Household member with disability	.013	(.055)	-.024	(.058)	.011	(.052)
Self with disability	-.112***	(.032)	-.020	(.041)	.132**	(.040)
Provide any care	-.032	(.059)	.024	(.067)	.008	(.063)
Age	.002	(.001)	.000	(.002)	-.002	(.001)
Male	-.003	(.037)	.058	(.043)	-.055	(.043)
Bachelor's degree or higher	.185***	(.040)	-.041	(.045)	-.143***	(.041)
Any children	-.044	(.042)	-.062	(.050)	.106*	(.051)
Married or cohabiting	.076*	(.038)	.029	(.045)	-.106*	(.043)
Employment situation (Ref: Employed full-time)						
Employed part-time	-.131**	(.048)	.093	(.063)	.038	(.060)
Not working	-.094	(.048)	-.024	(.054)	.118*	(.055)
Country (Ref: Sweden)						
Italy	-.145***	(.037)	.053	(.055)	.092	(.052)
Germany	.064	(.047)	-.012	(.053)	-.052	(.049)
United Kingdom	.120*	(.048)	-.074	(.054)	-.046	(.050)
Pseudo R ²	.097		.097		.097	

*** $p < .001$, ** $p < .01$, * $p < .05$.

Source: 2024 European Survey of Disability and Caregiving; $N = 802$.

Notes: Multinomial logistic regression models predicting probability of four categories of difficulty meeting expenses. Continuous variables are mean centered. AME refers to average marginal effects, which can be interpreted as a percentage point change in the probability of the outcome category associated with a unit change in the predictor variable. Standard errors are in parentheses. Estimates weighted for representativeness by country and disability status.

difficult to meet expenses. This fits with existing studies of disability and economic insecurity (e.g., Maroto and Pettinicchio, 2023a; Emerson *et al.*, 2021).

Like other research on the relationship between labor market participation and feelings of economic insecurity (Autor *et al.*, 2019; Cantó, García-Pérez and Romaguera-de-la-Cruz, 2020), we found that employment status was significantly associated with experiences of economic insecurity. Part-time workers were 13.1 percentage points less likely than full-time workers to say it was very easy to meet expenses in the previous month, and respondents without employment were 11.8 percentage points more likely than full-time workers to say it was hard to meet expenses.

Education also offered some protection against insecurity; those with a bachelor's degree or higher were more likely to report that it was very easy to meet expenses in previous months. Across countries, Italy once again stands out. Respondents living in Italy were less likely to report having an easy time meeting expenses by 14.5 percentage points when compared with those living in Sweden.

Table 5. Results from multinomial logistic regression model predicting economic insecurity with interactions between care and household member disability.

	Very easy		Somewhat easy		Somewhat or very hard	
	AME	SE	AME	SE	AME	SE
Household member disability care (Ref: No disability, no care)						
Disability, no care	-.101	(.057)	-.010	(.066)	.111	(.063)
Care, no disability	-.114	(.063)	.011	(.082)	.103	(.078)
Disability and care	.103	(.089)	-.013	(.091)	-.091	(.070)
Self with disability	-.097**	(.032)	-.021	(.041)	.118**	(.040)
Age	.002	(.002)	.000	(.002)	-.002	(.001)
Male	-.006	(.036)	.058	(.043)	-.052	(.043)
Bachelor's degree or higher	.184***	(.039)	-.039	(.045)	-.144***	(.040)
Any children	-.039	(.042)	-.063	(.050)	.102*	(.051)
Married or cohabiting	.081*	(.037)	.030	(.045)	-.111*	(.043)
Employment situation (Ref: Employed full-time)						
Employed part-time	-.133**	(.049)	.096	(.063)	.037	(.060)
Not working	-.103*	(.048)	-.022	(.054)	.125*	(.054)
Country (Ref: Sweden)						
Italy	-.148***	(.038)	.054	(.055)	.094	(.052)
Germany	.064	(.047)	-.014	(.053)	-.050	(.049)
United Kingdom	.103*	(.047)	-.072	(.054)	-.031	(.051)
Pseudo R^2	.104		.104		.104	

*** $p < .001$, ** $p < .01$, * $p < .05$.

Source: 2024 European Survey of Disability and Caregiving; $N = 802$.

Notes: Multinomial logistic regression models predicting probability of four categories of difficulty meeting expenses. Continuous variables are mean centered. AME refers to average marginal effects, which can be interpreted as a percentage point change in the probability of the outcome category associated with a unit change in the predictor variable. Standard errors are in parentheses. Estimates weighted for representativeness by country and disability status.

This is in line with studies examining how the relationship between household economic situations and perceptions of well-being are linked to differences in welfare states and social provisions (Autor *et al.*, 2019; Hadjar and Kotitschke, 2021; Balbo and Bolano, 2024).

Interacting household member's disability status with caregiving responsibilities in Table 5 showed few significant relationships with economic insecurity net of covariates. Notably, though, this relationship is partly related to the inclusion of other covariates, such as employment status in the model. This might suggest that much of the effect caregiving has on feelings of insecurity is conditioned by employment, and potentially by welfare state contexts. This finding further emphasizes the need to consider the multiple pathways that link disability and economic insecurity, work being one of them.

Discussion

By highlighting the complex relationships that exist between disability, caregiving, employment, and economic insecurity, our findings speak to how cultural and structural ableism can manifest in caregiving dynamics as they relate to economic outcomes. We show that disability status is negatively associated with both employment and financial security, which not only affects individuals but could also affect their households more generally. This is especially the case if providing care to a disabled household member is associated with lower employment levels, as we find. However, our findings also suggest that when caregivers for people with disabilities remain employed, they may not experience heightened feelings of economic insecurity, demonstrating the importance of employment as a protective factor for limiting perceptions of insecurity.

In line with our first research question, we found that employment is an important pathway linking disability, care, and precarity. However, we also find that living with a family member with disabilities was only associated with employment status for individuals who also provided care to that person. For instance, with model covariates averaged across the population, 38.1% of respondents who provided care for family members with disabilities were in full-time employment, compared with 52% of other respondents. In addition, 51.0% of these respondents were not working, compared with 32.5% of other respondents not providing care to someone with disabilities. We do not find that caregiving directly shapes experiences with economic insecurity, net of other variables, which runs contrary to expectations alluded to in our second research question. This attenuation likely reflects the mediating roles of employment, education, and access to other resources on caregiving and feelings of insecurity. Providing care can reduce hours of paid work or lead to withdrawal from the labor market, and these employment changes are a pathway through which caregiving contributes to economic insecurity. Other pathways may include extant household resources and policy supports in more generous welfare contexts. Yet, people with disabilities themselves were much more likely to report feelings of economic insecurity. Based on model predictions, 45.2% of individuals with disabilities reported that it was hard to meet their expenses, but only 33.4% of people without disabilities experienced insecurity in this way.

Our findings also point to the possibility of indirect pathways through which disability and care may influence work and economic well-being. While we do not formally test mediation, the observed relationships between disability, caregiving, and employment outcomes suggest that these factors may jointly shape economic security through multiple mechanisms. Factors such as education can potentially mitigate some of these effects by protecting against wage loss and

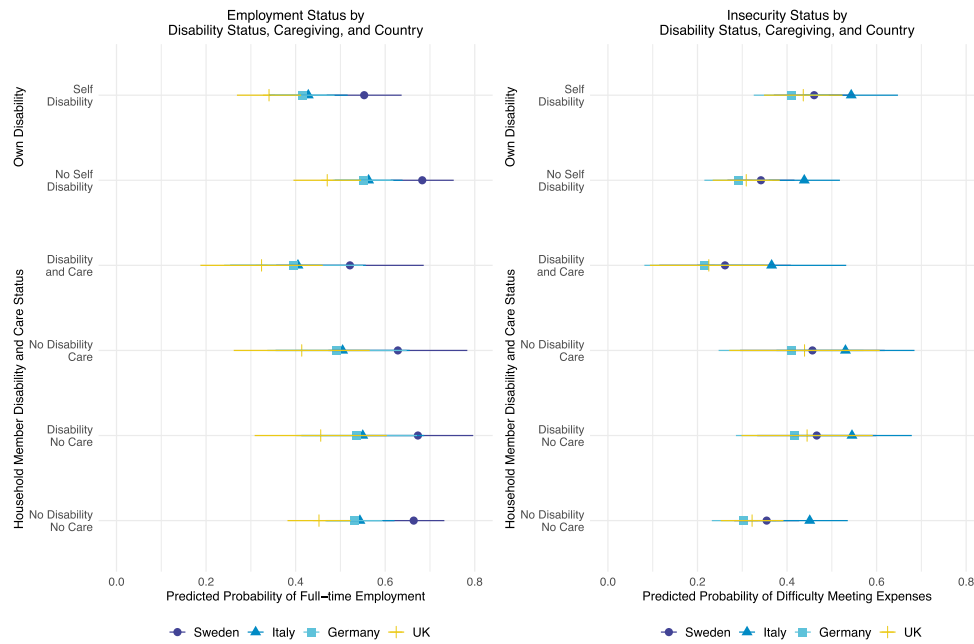


Figure 1. Predicted probability of employment status and economic insecurity experiences by own and household member disability status and country.

Source: 2024 European Household Survey of Disability; $N = 802$.

Notes: Predicted probabilities based on model results in Tables 3 and 5. Models include all covariates.

insecurity. In addition, country context—particularly the structure and generosity of welfare supports—likely plays an important role in attenuating negative relationships between work, care, and economic well-being. By including Italy, Sweden, Germany, and the UK in our analysis, we capture variation in these contexts and highlight how household experiences may differ across welfare regimes.

Figure 1 plots predicted probabilities of full-time employment and reporting difficulties meeting expenses based on disability status, caregiving, and country. Individuals living in Sweden were more likely than those living in Italy, Germany, and the UK to be in full-time employment. Although care and disability reduce employment in Sweden as elsewhere, individuals with disabilities as well as those providing care to a disabled household member in Sweden are comparatively more likely to work. This points to the potential ways policy interventions support people with disabilities and caregivers such that they continue to work, thereby reducing economic insecurity, with the literature finding this to be more likely among social-democratic welfare regimes (Hadjar and Kotitschke, 2021; Norberg, 2022). Relatedly, Italian households with individuals with disabilities, as well as those where a household member is providing care to a person with disabilities, were comparatively more likely to report feelings of economic insecurity. This is congruent with extant research pointing to how fewer and insufficient supports, lack of paid professional caregivers, and greater expectations

to provide household members with unpaid care in Italy can negatively impact economic well-being (Da Roit and Le Bihan, 2011; Albertini and Pavolini, 2017; Mussida and Patimo, 2021; Siza, 2022; Balbo and Bolano, 2024).

Few large-scale European surveys incorporate measures of disability, caregiving, employment, and feelings of insecurity. We therefore relied on a targeted online survey, a method becoming more common for analyses on specific populations (Baker *et al.*, 2013; Rivera, 2019). However, its use can limit the generalizability of our results, given that our data oversample respondents with disabilities. Although we incorporate post-estimation weights to address some of these issues, the survey is likely not fully representative of the larger population.

Our models were also limited by the small within-country sample sizes of approximately 200 respondents per country. This affected our ability to test for more expansive relationships between the type of disability and the type of care provided and our outcome variables. To investigate additional relationships with gender, we did test for interactions between gender and disability and gender and caregiving. None of these relationships were statistically significant.

Despite these limitations, our results highlight the strong relationships between members with disabilities in the household, supporting them through various caregiving activities, employment, and experiences with economic insecurity. Future research should further explore the interaction between caregiving and the experiences of care receivers (see Cranford, 2020), paying particular attention to the types of disabilities involved and the specific nature of care provided. This can enhance our understanding of the unique challenges faced by different households. Studies should also examine how access to various specific government supports influence both employment outcomes and perceptions of economic security for caregivers and individuals with disabilities cross-nationally. In addition to improving sociological understandings of care, household dynamics, and economic outcomes, focusing on these areas can better inform policy interventions aimed at mitigating economic insecurities associated with the so-called disability penalty.

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