

ORIGINAL RESEARCH ARTICLE

Caring labor performance and employment barriers among parents of children with autism spectrum disorder: An organizational behavior and bioethics perspective, with conceptual reflections on AI-informed neuroleadership

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Abstract

Autism spectrum disorder (ASD) diagnoses continue to rise globally, yet the employment consequences for parents providing daily care remain largely overlooked in management research. This paper examines the employment challenges faced by parents of children with ASD through organizational behavior, bioethics, and a conceptual discussion of artificial intelligence (AI)-enabled neuroleadership as a prospective, non-empirically tested management approach. Although employment participation is often framed as an individual responsibility, this study demonstrates how workplace cultures, managerial practices, scheduling policies, and organizational attitudes toward caregiving substantially influence caregivers' ability to remain active in the labor market. Data were collected through a structured questionnaire originally designed to investigate mobility and transport-accessibility experiences of caregivers of children with ASD. The analysis integrates descriptive empirical findings with organizational, ethical, and emerging AI-informed management perspectives to explore how socioeconomic status, caregiving intensity, and disability severity intersect with workplace expectations. The study further conceptually highlights the potential of AI-enabled workforce analytics, intelligent scheduling systems, and data-driven decision-support tools to support neuroleadership practices that enhance workplace flexibility, employee wellbeing, and organizational responsiveness to caregiving needs; no AI tools or validated neuroleadership instruments were applied or tested empirically in this study. However, the ethical implementation of such technologies requires careful consideration of transparency, fairness, privacy, and human oversight. Grounded in the principles of justice, autonomy, care, and sustainability, the study argues that equitable employment for caregivers requires organizational environments that combine empathetic leadership with innovative AI-supported management approaches. The study contributes to research on organizational behavior and health management by conceptualizing employment inclusion for caregivers of autistic children as both an ethical and sustainability imperative and a promising, conceptually framed area for future application of AI-enabled neuroleadership within healthcare, educational, and public-service organizations.

Keywords: Artificial intelligence; Neuroleadership; Autism spectrum disorder; Caring labor performance; Organizational behavior; Workforce analytics; Health workforce sustainability

1. Introduction

The neurodiversity paradigm represents a new way of understanding human cognitive variation and challenging deficit models in favor of ones grounded in dignity, acceptance, and inclusion.¹ Under such a paradigm, families such as those with children with autism spectrum disorder (ASD) seek to negotiate complex systems of care and support. However, these families often encounter numerous organizational barriers. Arguably among the most critical and overlooked areas in which these issues occur is the workplace. Many parents, particularly mothers concerned about their children's ASD, find their ability to meaningfully sustain their employment considerably impacted by family caregiver issues related to their experiences following their diagnosis.

Work is not just an economic act but also a social institution influenced by organizational behavior, work culture, and management policies. Organizational responses to caregivers differ greatly, and organizational culture regarding flexibility, communication, and family-friendly values significantly shape caregivers' continued participation in their role as workers despite having caregiver responsibilities. Intrinsic to all organizational behavior literature, work experiences depend on cultural benchmarks, management choices in their actions, and meaning-making processes in organizations.^{2,3} Such characteristics have particular prominence for caregivers whose circumstances deviate from what constitutes the "ideal worker."

Bioethical principles provide a way to study these issues from a different perspective to appreciate their ethical dimension. Organizations that do not recognize and adjust to these caring obligations undermine principles of justice, autonomy, and non-maleficence.⁴ The issue of work barriers experienced by women and members of lower-income families brings into question basic tenets of equity and equality in the utilization of opportunities. Work choices are also not individual but have numerous other considerations. Autonomy of parents to make choices is contingent upon their responsibilities toward their dependents as well as their business requirements.⁵ All these issues highlight the need to address work challenges conceptually and focus not just on dependence but also on other considerations such as caring and vulnerability.

The third lens—sustainability—is one way to begin to contextualize challenges in employment. A related concept to sustainability in terms of employment is workforce sustainability. A sustainable workforce occurs when organizations keep and promote diverse workers and sustain their welfare. Social sustainability calls for institutions to mitigate issues such as those faced by families who have

members with disabilities. Themes related to sustainability in organizations occur when organizations encourage their workers to cultivate emotional understanding, flexibility, and openness to ensure all workers can sustain their involvement. Exclusionary employment systems lead to unsustainable outcomes in all areas.

This study presents a secondary, descriptive analysis of data from a structured questionnaire conducted among parents and caregivers of autistic children in Greece. While the data discussed originally concerned mobility and accessibility issues, the questionnaire also captured demographic, socioeconomic, and occupational items that were not specific to the transport/mobility focus of the original study. This paper draws on those items for a new, employment-focused secondary analysis, an approach that allows existing, richly detailed survey data on a vulnerable population to be examined through an organizational-behavior and bioethics lens that the original study did not pursue. We disclose this secondary use explicitly here so that readers can situate the findings appropriately, and we present the results as descriptive evidence that motivates and informs the conceptual contribution of this study. It provides demographic data that ultimately shows systemic forces bearing down directly on employment issues. The overrepresentation of women and the presence of low-to-middle incomes, high care intensity, and variability in disability severity all suggest the presence of substantial employment challenges. By analyzing these data through the lenses of organizational behavior issues, bioethics issues, and sustainability challenges, this will highlight their systemic nature.

The study's aims and objectives are threefold. Firstly, it aims to determine organizational and structural barriers to employment for parents of autistic children. Presently, there exists little qualitative literature examining these issues. This study seeks to contribute to this area. In taking such a civil society perspective and examining equity from both organizational and global viewpoints, it relates to all three themes. This study aims to highlight caring for caregivers not only as sound business but as sound global practice. In examining caring for caregivers from such viewpoints, it meets these three themes. These aims are operationalized through three guiding research questions: (RQ1) What demographic, socioeconomic, and occupational profiles characterize caregivers of children with ASD in the sample? (RQ2) Which organizational, regulatory, and psychosocial factors do caregivers identify as the most significant barriers to, and enablers of, sustained employment? (RQ3) How can these descriptive findings be conceptually situated within organizational behavior, bioethics, sustainability, and, prospectively, artificial intelligence (AI)-informed

neuroleadership frameworks? No formal hypotheses were tested, consistent with the descriptive, exploratory design described in Section 3.

2. Literature background

2.1. Neurodiversity and social inclusion

The neurodiversity paradigm represents a paradigmatic shift in understanding and imagining meanings of disability and differences in research and policy debates. The concept of neurodiversity first appeared in 1999 to denote ASD, attention-deficit/hyperactivity disorder, and dyslexia no longer as disorders but as variations of human nature.¹ The concept challenges traditional models of inclusion that are premised on deficit approaches, advocating instead for models grounded in dignity, respect, and acceptance. It also contributes to broader debates on disability justice by emphasizing the transformation of social structures and institutions to allow inclusion, rather than requiring individuals to adapt or conform to predetermined norms.⁶

In this case, neurodiversity requires a paradigm shift from remediation to accommodation and from marginalization to empowerment. Barriers to inclusion for these members were not necessarily based on their inherent disadvantage but on their environment's disregard for their sensory considerations, communication needs, and predictability requirements.⁷ The concept of cognitive accessibility thus encompasses not only physical issues but also information clarity, emotional security, and understanding.⁸ These considerations play a very critical role in transport systems because these systems either facilitate inclusion or act as barriers to it. When mobility environment architecture disregards neurodiversity considerations due to overstimulation, unclear signage, and a lack of trained staff, it perpetuates disadvantage and undermines the autonomy of these members and their families.

The concept of social inclusion can be inextricably linked to spatial justice and the right to mobility. Researchers have avowedly asserted that "access to space/motion" undergirds democracy.⁹ In families living with autistic relatives, spatial inhibitions can be compounded by financial issues, caring commitments, and social stigma.¹⁰ Intersections occur such that these phenomena were described as "geographies of disability."¹¹ The concept of neurodiversity relayed in this way underscores that inclusion neither begins nor ends at issues of social acceptance but encompasses reshaping spaces to facilitate just mobility in the world.

Despite increased attention, there is little empirical work considering transport accessibility from the perspective of neurodiversity. The literature mainly

concentrates on educational/clinical inclusion^{12,13}, but little research explores transport systems and mobility issues, which play such an essential intermediary role in enabling participatory activity. The state of research essentially mirrors a disciplinary trend of "isolating" neurodiversity related to health and educational issues but disregards associated challenges to ethical investigations of transport systems. To overcome this issue, it would be essential to conduct inter-disciplinary research combining disability studies/ethics and transport science to investigate how social systems fulfill their ethical obligations despite neurodiversity. Transport-accessibility literature is included because it is the disciplinary context in which the present dataset originated, and because the same underlying mechanism—environments and systems designed around neurotypical assumptions becoming barriers for neurodivergent users and their caregivers—recurs, we argue, in workplace systems. Sections 2.2 and 2.3 develop this parallel explicitly for organizational and employment contexts, which are the empirical focus of this study.

2.2. Organizational behavior and employment outcomes for caregivers

Employment outcomes for parents of autistic children are not just impacted by individual circumstances but also by organizational behavior and dynamics. Studies have shown that caregivers of children with disabilities, and mothers in particular, suffer from decreased participation in the workforce, career advancement opportunities, and even loss of jobs because of inflexible caring demands and employers' lack of understanding about the challenges of caring for the disabled.^{14,15} In this context, it becomes clear how organizational behavior impacts inclusive employment.

Organizational culture strongly influences attitudes toward valuing and supporting caregiving. Organizations whose culture allows for caring, flexibility, and family-supportive values help caregivers to be committed to their jobs. Conversely, the culture of time discipline and inflexibility leads to caregiver burnout and withdrawal from the labor market.² Organizational behavioral theory suggests that employers play the role of "street-level bureaucrats," whose judgments have been shown to have direct bearing on workers' wellbeing.

Bioethics models provide further perspective. Barriers to employment may be considered unjust from a justifiable principle if caregivers and workers are discriminated against or if organizational structures systematically target women and families from lower socioeconomic status. A lack of fit between caring and workplace obligations

disregards relational autonomy if caregivers' freedom to make workplace choices is impeded by inflexibility.^{5,16} Ethical workplace principles must address vulnerability to workers and caring issues while maintaining the principle of non-maleficence.

The idea of sustainability is also relevant in a comparative way. Sustainability in the workforce calls for organizations to have a resilient and diverse worker population. Social sustainability also calls for equality of work opportunities irrespective of family composition.¹⁷ The inclusion of caregivers improves workplace sustainability and leads to lower worker turnover rates. In sustainability research, employing fathers of autistic children represents an area of great significance to organizational behavior, sustainability, and bioethics. The conceptual framework in Figure 1 illustrates how organizational inputs and processes shape the employment challenges experienced by parents of autistic children, ultimately influencing key ethical outcomes, such as dignity, autonomy, and justice.

2.3. Artificial intelligence and neuroleadership in supporting caregiver workforce inclusion

With advancements in AI, healthcare institutions are becoming increasingly reliant on AI for decision-making, workforce planning, employee wellbeing, and organizational performance.^{18,19} Beyond clinical applications, AI technologies can be successfully implemented in human resource management and allow for data-driven practices related to employee wellbeing, workload, and organizational sustainability. Such developments are highly relevant for employers who are caregivers of autistic children whose employment decisions are often shaped by the complexity of care demands and work-family conflicts.

A neuroleadership approach provides a useful perspective on how AI can facilitate decision-making

in an organization. Neuroleadership brings together neuroscience insights and leadership practice and focuses on emotional regulation, social cognition, adaptive decision-making, empathy, and resilience.²⁰ Leaders working in diverse and demanding conditions are often required to consider both organizational performance needs and employee wellbeing. The use of AI technology could assist in detecting signs of employee stress, workload imbalance, absenteeism, and burnout risks.²¹

Current research demonstrates that AI-based workforce analytics can help increase organizational responsiveness through prediction of employee needs in terms of staffing, identification of turnover factors, and analysis of causes of job stress.²² Such capabilities are extremely important within the scope of healthcare and social care, where workforce shortages and caregiver burnout are widespread issues. Scheduling systems using intelligent algorithms may allow for more flexible adaptation of work patterns to individual employee characteristics, whereas wellbeing monitoring tools can detect signs of mental tension and work-life imbalance.¹⁸

For the population of caregivers of autistic children, AI technology might provide opportunities to achieve workplace sustainability and inclusion. Predictive models will make it possible to implement more flexible work schedules, remote work options, and personalized approaches that would account for caregiving needs without decreasing organizational efficiency. Besides, AI-driven communication systems may help organize timely interaction between employees, their superiors, and various support resources.²³

At the same time, there is a wide range of ethical issues arising from the implementation of AI in human resource management. For example, algorithm-driven decision-making may produce biased outcomes reflecting the

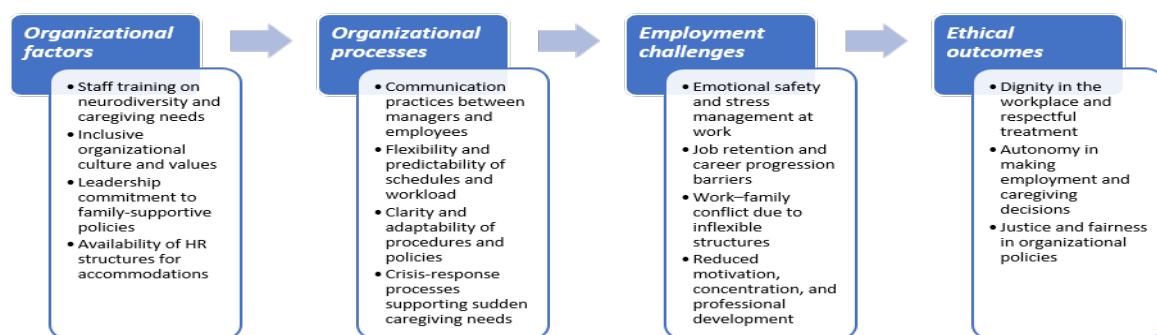


Figure 1. Conceptual framework of organizational factors influencing employment challenges for parents of autistic children
Abbreviation: HR: Human resources.

existing inequalities in employment due to the historical data used for machine learning.^{24,25} Privacy, transparency, responsibility, and employee autonomy have to be taken into account as well. In accordance with the principles of bioethics, any AI-based technology ought to involve human control, promoting equality and non-maleficence.²⁶ As such, neuroleadership enabled by AI technologies does not replace human agency but complements it.

To conclude, based on the above review, AI-assisted neuroleadership can serve as a mechanism facilitating caring labor performance, workforce sustainability, and workplace inclusion in the context of employers of caregivers of autistic children. Integrating intelligent decision-making tools with compassionate leadership styles may result in better employment outcomes and improve organizational responsiveness.

3. Methodological framework

3.1. Research design

This study employed a descriptive, cross-sectional quantitative research design, using a structured questionnaire to investigate the employment experiences, workplace challenges, and ethical issues reported by parents and guardians of autistic children. Although the questionnaire included a small number of open-ended items, these were not subjected to systematic qualitative or thematic analysis in the present study; consequently, the study is presented here as descriptive-quantitative rather than mixed-methods, and the unanalyzed open-ended responses are noted as an avenue for future qualitative work (see Section 5). Grounded in a bioethical framework, the study drew upon values of autonomy, justice, non-maleficence, and care to guide all stages of data collection and interpretation. This ethical orientation ensured that the research balanced methodological rigor with respect for the lived realities of participants, providing fair representation and acknowledging the moral and social contexts that shape caregiving. To reduce the risk of common-method and social-desirability bias, the questionnaire was administered anonymously, items addressing barriers and items addressing support needs were presented as separate question blocks with different response formats (ranking versus Likert scaling), and no item explicitly linked a respondent's reported barriers to their reported support preferences, reducing the likelihood that answers in one block mechanically shaped answers in another.

The questionnaire was developed through an interdisciplinary process informed by literature on neurodiversity, family caregiving, organizational behavior, employment inclusion, and ethics.^{4,15,27,28} The instrument

was designed to capture three interrelated domains:

- the demographic and socioeconomic background of caregivers,
- characteristics of the autistic child and associated care demands, and
- experiences and perceptions related to employment, workplace support, and professional development.

Questions were structured to allow both descriptive statistical analysis and interpretive insight by combining closed questions, Likert scaling, and open questions. The research fully incorporated best practices in disability research to avoid stigma and cognitive loading.²⁹ The data collection method utilized online question administration to allow maximum accessibility, geographic distribution, and confidentiality, which are critical in sensitive research areas such as caring, work-related strain, and family wellbeing. The study fully utilized both quantitative generalizability and qualitative depth to embed its epistemological interpretation of numbers through ethical reflection on care and dignity in work experiences among caregivers.

3.2. Data collection

The study participants were parents and main caregivers of children who had been diagnosed with ASD and resided in different parts of Greece. The study aimed to benefit from cooperation with autism advocacy organizations and parental organizations to make it easier to conduct the research. The inclusion criteria were being over 18 years old and having at least one child who had been diagnosed with ASD. The questionnaire was distributed electronically (online survey link) through partner autism advocacy and parental organizations' mailing lists and social-media channels, using a convenience/purposive, non-probability sampling approach; participation was voluntary and anonymous. Because the survey link was openly circulated through multiple third-party channels rather than sent to a fixed, enumerable list of invitees, an exact response rate could not be calculated, and this is acknowledged as a limitation in Section 5.

A total of 420 usable responses were gathered during the data collection process (May to October 2025). The sample comprised participants from all walks of life in terms of educational and occupational background; this included public service workers, private practitioners, and self-employed and unemployed caregivers. The diversity allowed for exploration of intersections of socioeconomic location and employment experiences, providing insight into issues of distributive justice associated with workplace access. The study considered diverse ages, sex, and awareness of disability level of their children to represent

variability.

4. Results

4.1. Respondent profiles

The participant demographics, as shown in Table 1, demonstrate a marked disparity in gender representation: 91.5% were female-identified, compared with 8.5% who were male-identified. This correlates well with what is generally accepted in the literature about caring roles in families with children with disabilities, whereby women are responsible for far greater caring loads.^{15,30} In terms of bioethics, it calls attention to caring not just being seen as part of role responsibilities, but as something fundamental to human society that should be addressed. The maternal demographic significantly shapes the perspective from which employment barriers in this study are interpreted.

Regarding caregivers' ages, the largest percentage of participants corresponded to the 40–50 year-old group (41.0%), followed by 50–65 year-old caregivers (30.3%) and, then, 30–40 year-old caregivers (22.5%). In other words, caregivers are mainly middle-aged and have to juggle their professional duties while providing full-time care to their loved ones. Held²⁵ described this demographic as engaging in “double-duty care,” as these caregivers must navigate their family life and work life simultaneously. Bioethically speaking, it would seem these demographics not only question matters of justice but also sustainability.

An overwhelming percentage of respondents (83.6%) reported being married; 16.4% reported being single, separated, divorced, or widowed. While joint parental families may provide greater flexibility concerning caring schedules, the small number of lone caregivers represents a group potentially at harm due to compounded issues of emotional and financial distress. This subgroup's experiences are particularly relevant to understanding relational autonomy in the workplace, as lone caregivers may have fewer informal supports to draw on when negotiating flexible working arrangements.

Further insights into employment precarity came from socioeconomic data. A large number of respondents (43.8%) have annual incomes between €12,000 and €25,000, and 28.5% have less than €12,000 in earnings. Nearly three-fourths of all families have incomes classified as low to lower-middle class. Only 16.2% have incomes between €25,000 and €40,000; all other incomes above this level (7.6% earn between €40,000–€60,000; 3.8% earn above €60,000) remain negligible. In other words, incomes among caregivers generally represent precarity relevant to direct ethical considerations regarding fair pay and workplace equity. Income differences imply ethical inequity

in access to secure employment based on Sen's³¹ capability approach to ethics: limited financial capabilities not only limit material capabilities but also degrade real freedom—or in this case, freedom to participate in dignified, secure, and well-remunerated employment.

The data on educational attainment revealed that 55.8% of the participants have a degree from an internationally recognized university, followed by 13.0% who have postgraduate or doctoral awards, and finally 31.2% who have secondary education and below. This moderately educated population suggests that while many caregivers have some form of higher education, a large proportion may not have access to specialized knowledge about workplace rights and employment-support entitlements. In ethical terms, this situation raises issues about epistemic inequality²⁷, where inequality related to information and understanding may be perpetuated even if there is equality in accessibility.

Table 1. Demographic and socioeconomic characteristics of respondents

Variable	Category	Percentage (%)
Gender	Female	91.5
	Male	8.5
Age group (years)	30–40	22.5
	40–50	41.0
	50–65	30.3
	>65	6.2
Marital status	Married	83.6
	Single/divorced/widowed	16.4
Annual household income (€)	<12,000	28.5
	12,000–25,000	43.8
	25,000–40,000	16.2
	40,000–60,000	7.6
	>60,000	3.8
Educational attainment	University degree	55.8
	Postgraduate/PhD	13.0
	Secondary or less	31.2
Child's gender	Male	71.8
	Female	28.2
Child's age (years)	0–5	22.8
	6–10	45.4
	10–15	19.9
	15–18	11.9

Concerning their characteristics, 71.8% of children were male, and 28.2% were female, corresponding to

usual autism diagnosis data.¹¹ The representativeness of the sample to autism research study data is confirmed. However, from a bioethical perspective, it would seem that a lack of attention toward female autism profiles contributes to the disregard of the particular caregiving and workplace-support needs associated with caring for autistic girls, whose presentations and support requirements may differ from those typically described in the literature.

Regarding age distribution, the largest proportion of these kids was aged 6 to 10 (45.4%), followed by 0 to 5 (22.8%), 10 to 15 (19.9%), and 15 to 18 (11.9%). This distribution shows that these families are generally participating in early-middle and middle childhood stages, where dependence on adult assistants for travel is high. The moral/ethical considerations are profound; it is advisable to keep capabilities to fully participate free from relational autonomy restrictions, such as shared decision-making dynamics and contextual factors, such as stress.

The distribution of the disability percentage of the child shows diversity in terms of their needs. A percentage of 33.6% of such children fell in the >80% category; 20.3% in the 67%–80% range; and 24.5% in both the 50%–67% and <50% ranges. These data suggest that over half of these subjects have intensive care needs as they are moderately to severely limited.

In terms of bioethical considerations, this profile reiterates the importance of care-sensitive workplace arrangements focusing on relational autonomy—that is, the understanding that caregivers' capacity to remain in employment must be developed in conjunction with employer flexibility and support. While families in general may have limited employment options available to them because of their children's high level of disability, questions arise related to issues of distributive justice and capability deprivation. Conversely, families who have lesser-known and lesser-visible disabilities may be plagued by issues related to social embarrassment and discomfort from sensory issues neglected in standard workplace accommodation policies.

The demographic and socioeconomic profiles together capture a female-, mid-aged-, and low-income caring group who solely look after young to school-aged autistic children. These characteristics reflect complex sensibilities of vulnerability and ethical urgency not just in gender issues related to care but also in questions of fairness in income distribution and epistemics. Recognizing these facets is imperative to develop workplace and employment policies with ethical sensibilities toward neurodiversity families.

4.2. Professional and sectoral employment profile

The occupational structure of the respondents showed a diverse but lopsided situation. The main group consisted of public-sector workers (24.6%), followed by private-sector workers (21.7%), and unemployed caregivers (12.6%). Other categories included retirees (6.9%), public-sector supervisors (4.6%), and public-sector directors (2.9%). The data show the dominance of public-sector jobs, which come with perceived stability in terms of work hours and leave—providing limited but still considerable flexibility for families caring for their autistic members. According to bioethics principles, these occupational circumstances would improve relational autonomy, allowing caregivers to better juggle their occupational and caring duties.

However, the presence of 12.6% unemployed respondents provides insight into the challenges caregivers face in balancing work and caring responsibilities. Interpret alongside the income distribution reported in Section 4.1, this unemployed subgroup is concentrated in the lowest income brackets, since households with no working caregiver are, by definition, dependent on a single income or on state support; this descriptive pattern is consistent with the income precarity reported among nearly three-fourths of the sample and reinforces, at a descriptive level, the link between employment exit and financial vulnerability that the Section 5 (Discussion) develops further. Similarly, families reporting the highest disability-severity band (33.6% above 80%) were overrepresented among caregivers who rated crisis-management support and special leave as critically important (Section 4.4), suggesting that care intensity and employment-support need co-vary descriptively even though no formal statistical test of this association was conducted. Carers who quit their jobs to fulfill their child's requirements suffer not only financially but also lose their social life, which has been described as "relation injustice."^{25,32} The subgroup of 6.9% who belong to the "retired" category logically represented senior caregivers who continue to take part in their child's care even beyond their retirement ages and convey meaning about lifelong "care" in neurodivergent families. The inflexibility of the labor market structure and related moral and financial risks to women caregivers are obvious from these findings (Figure 2).

Further insight into this occupational profile can be obtained from sectoral distribution. The sector with the highest percentage was education (25.9%), followed by health services (13.6%), administrative activities (12.9%), and wholesale and retail trade (12.9%). The high percentages of occupations related to education and health may reflect greater awareness about issues related to social

inclusion and disability. However, it can be surmised that many workers may be in inflexible, time-constrained jobs related to administration and trade, as these have very limited autonomy.

Other industries such as professional and scientific services (8.8%), information and communication (5.4%), and artistic activities (4.1%) had lower representation, whereas manufacturing (3.4%), real estate (2.0%), and other infrastructure areas (such as energy, transport, and waste management; all <4% combined) remained negligible. The dominance of service-oriented sectors and knowledge services corresponds to overall national employment patterns and signifies limited representation of caregivers in flexible and high-autonomy jobs. The key here is that there are no caregivers present in manufacturing and mining industries because of the intrinsic gender stratification of the workforce and the incompatibility of such physically demanding occupations with caregiving responsibilities.

In ethical terms, these occupational structures draw attention to the complex interplay between work conditions and issues of social justice and care ethics. While caregivers who work in supportive organizations related to education and health have their vulnerability to social exclusion mitigated in their occupational role, large numbers of caregivers continue to be employed in occupations marked by inflexibility and high vulnerability. In other words, there is a clear ethical need to construct occupational justice policies focusing on care-sensitive work approaches such

as flexibility and teleworking to protect caregivers who look after neurodiverse children (Figure 3).

4.3. Factors affecting professional development

Several organizational, regulatory, and psychosocial factors significantly acted as barriers to professional development for parents caring for autistic children. The major critical barriers were systemic in nature; lack of regulatory work provisions ranked second-highest in critical significance (40.57%), while the lack of support or welfare provisions from the state ranked highest (50.47%). The findings suggest that systemic issues significantly impinge caregivers' ability to maintain their work. Lack of support from the environment was also an important factor, as 19.63% ranked it very important. Lack of support from colleagues and family members also contributes to their unemployment burden; these issues reflect the complex experiences as caregivers. Meanwhile, the feeling of isolation was also critical to their unemployment issues, as 44.86% ranked it very critical or critical. Together, these results reflect caregivers' complex challenges related to their professional development amid their experiences caring for autistic children (Figure 4).

4.4. Measures for balancing work and parental role

The study also investigated what parents of autistic children rate as critical in enabling them to meet their work obligations. The findings indicate strong willingness to have flexible and responsive workplace initiatives. Childcare support was rated as very important by 81.48%, followed

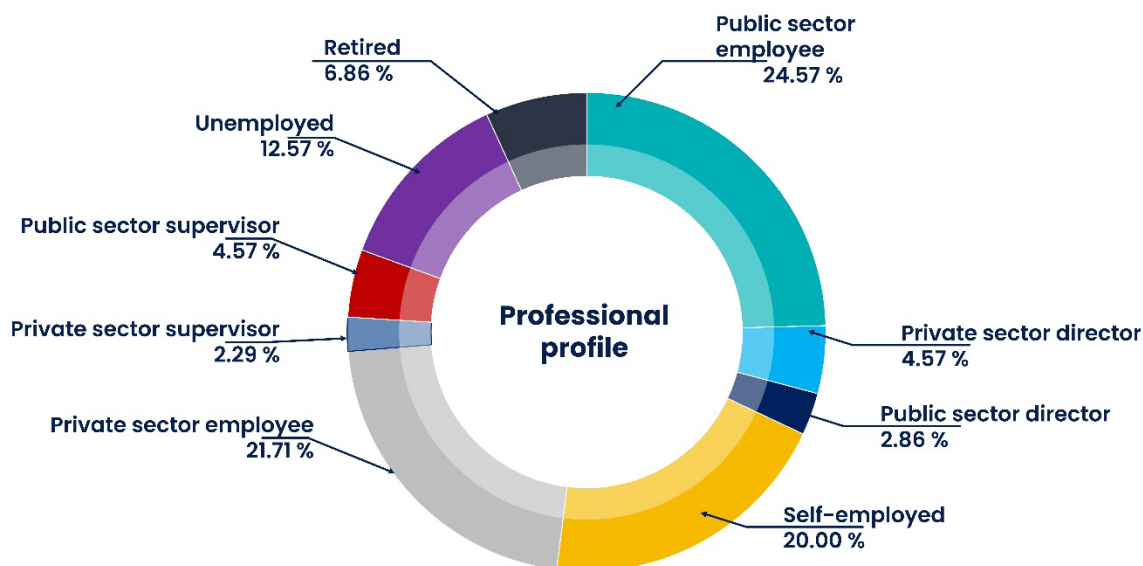


Figure 2. Respondents' professional profile

by crisis management support (72.38%) and special leave (71.96%). Special leave allowances were rated as very important by 65.38% of participants. Key to understanding these responses is appreciating their value to parents who require flexibility related to therapy sessions.

Dependence and survival as a nurse while caring for family members emerged as one of the themes. Respondents also rated the option for remote work (52.94%), reduced working hours (57.14%), and flexible working hours (67.29%) as very important measures. Psychological support also remained very important for 62.39% of respondents because it emphasizes not only intense caring but also emotional costs. Lastly, financial benefits, support, etc. were very important to 61.47% of respondents, emphasizing the financial costs incurred due to half-work hours, job instability, and out-of-pocket payments for therapy services.

In general, these findings suggest that parents of autistic children value a combination of childcare assistance, crisis-sensitive organizational policies, flexible work options, and financial/psychological relief. The combination of these elements represents not only a need for organizations to implement sustainable and family-friendly workplace strategies but also to accept caring as an integral part of workers' lives instead of something to be dealt with individually.

5. Discussion

The findings from this research show that parents of autistic children encounter complex issues in balancing their life and work, and that these issues not only emanate from their personal life situation but also from their work environment. The dominant presence of female participants in this study reflects their inherent demographic dominance in caring work and its bearing

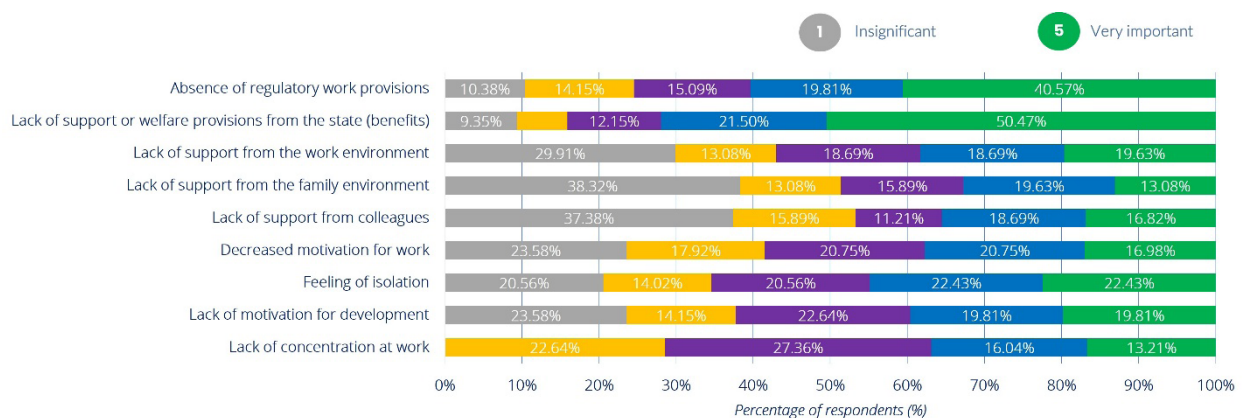


Figure 3. Factors affecting professional development

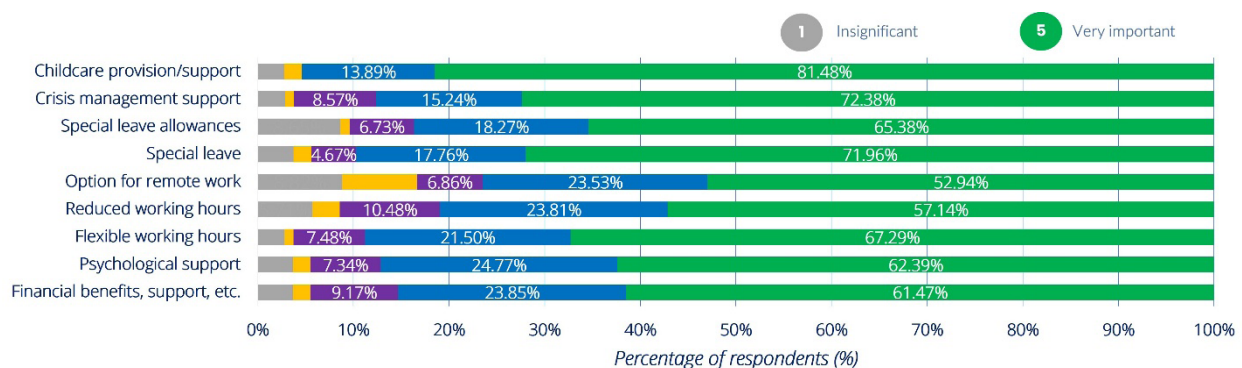


Figure 4. Measures for balancing work and parental role

on their professional careers. The bioethical issue of justice arises here because women have remained vastly impacted by demotivation in their professional life and financial conditions. The literature on ethics of care theory has demonstrated how society, and hence organizations as an integral part, depends on mothers for their invisible caring work.^{33,34}

Organizational behavior plays a significant role in shaping these caregivers' workplace experiences.^{20,35} The caregivers' responses overwhelmingly indicate that they feel unsupported in their working environment and home life. A lack of organizational understanding of their caregiving responsibilities and insufficient workplace flexibility to accommodate their needs contribute to reduced productivity, diminished motivation, and poorer mental health. Furthermore, caregivers' high ratings of issues such as feeling isolated, losing concentration, and demotivation signify the emotional distress associated with balancing caregiving responsibilities and workplace demands, as well as their limited opportunities to participate in professional development activities at work.²

In addition to challenges related to human interaction and culture, the results highlight challenges from regulatory and policy perspectives. Participants considered a lack of provisions for regulatory work and a lack of state support as among the most significant obstacles to their professional development. These issues indicate that challenges faced by caregivers extend beyond individual organizations and reflect broader labor and social policy systems that are insufficiently supportive of families raising neurodiverse children. In terms of distributive justice⁴, these issues challenge equitable access to employment opportunities and career advancement for caregivers who face substantial emotional and financial burdens.

At the same time, these findings clearly indicate that caregivers have a distinct set of supportive requirements that they consider essential for balancing work and caregiving obligations. Childcare support services, crisis management help, and special leave options were rated as the highest priorities, indicating the unpredictable and intensive nature of caring for autistic children. Flexible and reduced working hours, together with teleworking options, were also highly rated, underscoring the fundamental role of work autonomy and flexibility in enabling caregivers to remain employed. Such interventions represent part of a wider organizational trend toward acknowledging caregiving responsibilities as a legitimate aspect of employees' identities and roles, in line with organizational behavior theories.^{3,36}

The findings have broader implications for sustainability. First, work sustainability requires organizations to retain

staff by accommodating their personal situations. When caregivers are forced to leave their jobs or reduce their working hours due to inflexible workplace policies, organizations risk losing skilled employees and intellectual capacity. Organizational sustainability also requires the development of inclusive work environments that enable all employees to participate fully and contribute effectively.^{37,38} Lastly, social sustainability may be undermined if families of autistic individuals face reduced employment opportunities, increased economic insecurity, and greater social isolation.

Taken together, these findings highlight a complex set of challenges and opportunities. The challenges faced by employees caring for autistic children extend well beyond time management and resilience, reflecting broader organizational issues. Addressing these challenges requires organizations to adopt family-friendly policies that recognize the legitimacy of caring demands while designing workplace practices grounded in the ethical principles of justice, autonomy, dignity, and non-maleficence.^{39,31} Achieving these goals will require rethinking work organization, equipping organizational leaders to respond with empathy and flexibility, and advocating for policy and regulatory reforms that better protect and support caregivers.

As with any cross-sectional survey study, the findings reported here describe associations rather than causal effects. The secondary-data context, sampling approach, and conceptual status of the AI-informed neuroleadership discussion are described in Sections 1, 2.3, and 3. Future research building on this work will benefit from a purpose-built, longitudinal instrument; from piloting the AI-enabled tools discussed conceptually here; and from thematic analysis of the open-ended responses collected alongside the quantitative items reported.

6. Conclusion

The study shows how parents caring for autistic children are confronted by a number of workplace challenges that extend beyond caregiving responsibilities to encompass organizational behavior, structures, and state services. The results indicate that regulatory gaps, inadequate workplace and collegial support, inflexible work arrangements, and psychosocial stresses such as social isolation and reduced motivation cause major hindrances to caregivers' employment and professional development. These challenges disproportionately affect women, who continue to bear the burden of caregiving responsibilities.

In terms of organizational behavior theory, these findings reinforce the importance of workplace culture, management mindsets, and approaches to

employee engagement and productivity for caregivers. Organizations that maintain inflexible schedules, minimal communication, and limited criteria defining what constitutes the “ideal worker” effectively marginalize such caregivers. At the same time, the highly valued support measures identified by respondents, such as childcare services, crisis management services, flexible working hours, teleworking options, and mental health services, emphasize organizational practices that can enable caregivers not only to remain employed but also to sustain productivity and workplace wellbeing.

The findings have strong sustainability implications. A sustainable workforce must retain diverse workers, such as caregivers, by valuing their welfare and not losing them to organizational inflexibility. Organizational sustainability calls for creating cultures and systems that value care as part of workers’ lives. Social sustainability improves when organizations mitigate inequities rather than exacerbate them, supporting families whose lives revolve around unpredictable care obligations.

In conclusion, these results collectively highlight the inclusion of workers with autistic children as both an organizational and ethical imperative. Ensuring fair and dignified workplace conditions requires a multi-level approach involving management practices, human resource structures, support from colleagues, and state regulations. Improving the work–life balance for parents of autistic children requires not only targeted support but also a broader transformation of organizational cultures toward greater family inclusiveness. Organizations that recognize and accommodate the realities of caregiving responsibilities will be better positioned to build resilient workforces and promote equity amid ongoing changes in the contemporary work environment.

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Conflict of interest

The authors declare they have no competing interests.

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Ethics approval and consent to participate

This study was conducted in accordance with the Declaration of Helsinki and was approved by the Ethics Committee of Democritus University of Thrace (protocol code 62750/532 on May 22, 2025). Informed consent was obtained from participants prior to their participation in the study.

Consent for publication

Consent to publish the anonymized data was obtained as part of the informed consent procedure described above. All results are presented in aggregate form, and no personal or identifying details are disclosed.

Availability of data

The original contributions presented in this study are included in the article. Further inquiries can be directed to the corresponding author.

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