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ORIGINAL ARTICLE

Work-Family Conflict, Parental Stress, and Work Centrality Among Parents of 0–4-Year-Old Children with Neurodevelopmental Disorders

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Abstract
This study compares work-family conflict (WFC), parental stress, and work centrality among parents of children aged 0–4 with neurodevelopmental disorders (NDDs), compared to parents of children of the same age without an NDD diagnosis. It also examines the role of parental stress as a mediator or moderator in the relationship between parental group (child with NDD vs. no NDD diagnosis) and WFC. 346 Israeli parents (155 with children with NDDs, 191 with children without an NDD diagnosis) completed online questionnaires. Parents of children with NDDs work less and have lower education and income. They experience greater parental stress and struggle more with WFC. An interaction effect between parental stress and WFC was observed, which was stronger among parents of children with NDDs. Parental stress mediated the relation between the parental group and WFC. The findings highlight the vulnerability of parents of children with NDDs in both the work and family domains, emphasizing the need for targeted support and policy considerations to address their unique challenges in achieving less WFC.

Keywords Work-family conflict (WFC) · Family-work conflict (FWC) · Neurodevelopmental disorders (NDDs) · Parental stress · Work centrality · Employment factors

Introduction

Work-family conflict

Work-family conflict (WFC) is the extent to which responsibilities in the work and family domains clash. Essentially, it means that fulfilling obligations in one area (work or family) makes it harder to meet obligations in the other area (Netemeyer et al., 1996). The work aspect refers to working hours, labor intensity, and the time spent on professional duties. Excessive work hours or high-stress environments can impact family life, potentially causing fatigue, anxiety, or other physiological consequences that affect the quality of personal and family time (Lero & Fast, 2018; Sjöberg et al., 2020). The family aspects refer to the responsibilities involved in being a parent or spouse, and tasks such as childcare and household chores (Brough et al., 2020). These duties often require substantial time and emotional investment, which can affect work performance. Achieving less WFC involves managing these diverse demands and harmonizing professional obligations, family responsibilities, and personal pursuits.

The European Union (EU) has recognized WFC as a critical factor affecting individuals' health (Borgmann et al., 2019) The EU provides insights into well-being and quality of life by measuring the relationship between work hours and leisure time across countries. For example, a study across 27 countries, not all from the EU, found that women generally report higher levels of conflict than do men. Factors such as working hours, children, and job characteristics influence this perception. On a broader scale, access to childcare and maternity leave can reduce perceived conflict for both genders (Stier et al., 2012).

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Children with Neurodevelopmental Disorders

According to UNICEF (2021), one in ten children globally has a disability, totaling around 240 million children. These children encounter various physical, cognitive, or emotional conditions that result in difficulties or limitations in daily activities. Specifically, neurodevelopmental disorders (NDDs) are a category of conditions that arise during early childhood, typically before a child starts formal education schooling.

Based on the DSM-5 (APA, 2013), the NDD category includes disorders such as intellectual disability, attention-deficit/hyperactivity disorder (ADHD), autistic spectrum disorder, communication disorders, specific learning disorders, and motor disorders, such as Tourette's (Francés et al., 2022). These disorders are characterized by developmental deficits that significantly impact the children's life course in areas such as self-care, social participation, academic achievement, or occupational functioning in adulthood (Blanco-Martínez et al., 2020).

WFC can affect parents of children with disabilities to a greater extent due to the burden of childcare one the hand and the need for sustainable jobs on the other hand (Lero & Fast, 2018). Resch et al. (2010) found that these parents want to work but experience multiple barriers in maintaining stable employment due to the children's needs, especially in the first years. Raising a child with NDDs is described by parents as involving confrontation with society and medical institutions, on top of the child's daily needs, all of which combine to create parental stress (Currie & Szabo, 2020; Fäldt & Fängström, 2024). Moreover, in the first years, the parents are challenged by the child's medical diagnosis as well as treatment, which is sometimes provided without adequate support and assistance (Sapiets et al., 2021).

Parental Stress

Parental stress is defined as the difficulty arising from the demands of the child-parent interactions, the child's needs and the parents' ability to cope with the child's needs and the very fact that their child has disability (Abidin, 1995). While parental stress is common also among parents of children without NDD diagnosis, parents of children with NDDs often face higher risks of negative outcomes due to increased caregiving demands (Ashworth et al., 2019; Craig et al., 2016). Moreover, parents of children with NDDs face financial difficulties, caregiving burdens, coping with the child's adaptation challenges, social isolation, and concerns about their ability to maintain continuity of care (Manor-Binyamini, 2012; Young et al., 2020). Indeed, comparative studies have found that parents of children with NDDs experience higher levels of parental stress compared to parents of children without an NDD diagnosis (Craig et al., 2016; Gupta, 2007; Hayes & Watson, 2013). They also experience high WFC due to childcare needs (Balachandran & Bhuvaneswari, 2024).

Fewer studies have tested the association between parental stress and WFC. Balachandran and Bhuvaneswari (2024) studied a sample of 20 parents of children with NDDs and found that parental stress was related to high WFC, especially during the COVID −19. A similar association was found in the general population (Moreira et al., 2019), and among parents of children with NDDs (Breevaart & Bakker, 2011). Finally, a study of 122 parents of autistic children found significant WFC challenges: 38.4% reported that childcare negatively impacted their work performance, and 22.3% had to reduce work hours to meet caregiving needs (Matthews et al., 2011). None of these studies has looked at the relationship between parental stress and WFC among parents of children with NDDs aged 0–4, a time when childcare demands often increase following the initial diagnosis and medical care.

Work Centrality

Work centrality refers to the extent to which workers believe work plays an important role in their lives and perceive themselves as involved in their work (Haller et al., 2023; Jiang & Johnson, 2017; Kanungo, 1982). Various studies that compared the work centrality and involvement of parents of children with NDDs with those of parents of children without NDD diagnosis, found that the former, especially mothers, tended to give up on career advancement; they worked fewer hours, were less educated, and earned less (Crettenden et al., 2014; Marquis et al., 2020). Additionally, it was found that parents of children with NDDs, compared to parents of children without NDD diagnosis, were employed in jobs that required simpler skills (Stefanidis et al., 2020). Although most studies indicate that parents of children with NDDs have work strain, it was also found that caregiver mothers have benefit from persisting in work (Morris, 2014), highlighting the importance of work in their lives.

The Study Aims

To the best of our knowledge, most of the literature about WFC relating to parents of children with NDDs concentrated on children aged older than four. This study aims to fill this gap by examining WFC among parents of children with NDDs compared to parents of children without NDD diagnosis, all aged 0–4. Informed by the review of the literature, our research hypotheses are as follows:

1. Parents of children with NDDs would report fewer working hours, lower education and income levels, and higher parental stress compared to parents without NDD diagnosis
2. Parents of children with NDDs would experience lower levels of work centrality and higher WFC and parental stress compared to parents of children without NDD diagnosis
3. We hypothesize that parental group (NDD vs. non-NDD diagnosis), work centrality, and parental stress would predict WFC, even after accounting for demographic variables.

Additionally, we will explore whether parental stress serves as a mediator or moderator in the relationship between the parental group and WFC.

Materials and Methods

Procedure

A cross-sectional study was conducted from October 2022 to October 2023. After obtaining approvals from the Ethics Committee of the School of Social Work at [Sapir Academic College], we approached Israeli parents to children with NDDs and parents of children without NDD diagnosis through social media. Parents who agreed to participate completed an online questionnaire. Participation in the study was voluntary and anonymous. Participants could stop completing the questionnaire at any time and were assured of anonymity.

Participants

The sample size was calculated using the G*Power 3.1 software to ensure sufficient statistical power of 0.95 (Faul et al., 2009). Out of our 346 participants, 155 (44.79%) were parents of children with NDDs, and the rest were parents of children without NDD diagnosis. Among the former, 44 (27.5%) were diagnosed with intellectual disability (ID), and 116 (72%) with autism spectrum disorder (ASD). We grouped ASD and intellectual disability together as neurodevelopmental disorders (NDDs) in accordance with DSM-5 guidelines, which emphasize their shared etiological factors and functional impairments. This classification reflects the considerable overlap in genetic, clinical, and caregiving characteristics and is consistent with best practices in clinical case formulation (Harris, 2014). Additionally, since no significant differences were found between parents of children with intellectual disability and those with ASD in work-family conflict, work centrality, or parental stress, we analyzed them as a single group.

The parents' mean age was 39.32 ($SD = 6.56$). The majority, 268 (77.45%), were women. Most participants, 304 (94.88%), were in a relationship, and the rest were widowed, divorced, or single. The mean age of the child was 2.25 ($SD = 1.1$). The mean number of children in the family was 2.76 ($SD = 1.47$). Nearly half of the parents, 162 (46.82%) had a bachelor's degree, 122 (35.26%) had a master's degree or higher, and 66 (19.07%) had high school education. Nearly half, 154 (44.50%), reported below-average income, 72 (20.80%) reported average income, and the rest reported above-average income. Most participants, 303 (87.57%), were self-employed, 41 (11.84%) were salaried employees, and the rest were unemployed. Regarding job scope, most of them, 213 (61.56%), worked full-time, 122 (35.66%) worked part-time, and 11 (3.17%) worked in occasional jobs.

Table 1 presents the demographic variables as a function of parenting a child with NDD. As can be seen in the table, the parental groups were matched on gender, employment status, child's age and number of children. They differed in parental age, relationship status, education and income. The latter variables were entered into the regression as covariates.

Measures

Dependent Variable

WFC was measured using Netemeyer et al.'s (1996) scale that consists of ten items, with five measuring WFC (e.g., "The demands of my work interfere with my family life") and five measuring family-work conflict (FWC; e.g. "The demands of my family interfere with work-related activity"). Responses were rated on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). In the current study, Cronbach's alphas for WFC and FWC were 0.91. and 0.90, respectively. Higher scores for the full questionnaire indicated higher WFC. This scale demonstrated high reliability in previous studies (e.g. 0.93; Abd Razak et al., 2019). In the current study, Cronbach's alpha for the full scale was 0.93.

Mediating and Moderating Variables

The Parental Stress Index (PSI; Abidin, 1983) consists of 36 items focusing on three dimensions: parental distress, dysfunctional parent–child interaction, and perception of the child's behavior as challenging to cope with (e.g., "My child rarely does things for me which make me feel good"). Participants were asked to respond on a Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). Scores are obtained by summing all items, with higher scores indicating higher parental stress. This scale demonstrated high reliability in previous studies (0.91; Abidin & Brunner, 1995), and its Cronbach's alpha in the current study was 0.92.

Table 1 Differences in Research Variables by Parent Group, χ^2 and t-test

		Parents of a child with NDD (155)		Parents of a child without an NDD diagnosis (191)		Overall		Statistical test
		n	%	*n*	%	*n*	%	χ^2
Gender	Male	29	36.8	52	63.2	81	23.41	3.167
	Female	126	47.54	139	52.46	265	76.59	
Relationship	Yes	127	42.05	175	57.79	302	87.82	8.618**
	No	29	65.9	15	34.1	44	12.8	
Education	High school	42	64.62	23	35.38	65	19.07	10.261**
	BA	68	42.5	92	57.5	160	46.24	
	MA	47	38.8	74	61.2	121	35	
Income	Below average	74	48.36	79	51.64	153	44.22	5.721*
	Average	37	52.11	34	47.89	71	20.52	
	Above average	45	36.89	77	63.11	122	35.26	
Employment status	Salaried	15	36.59	26	63.41	41	11.85	2.737
	Self-Employed	137	45.82	162	54.18	299	86.42	
	Unemployed	4	66.66	2	33.37	6	1.73	
Job scope	Occasional jobs	81	59.12	56	48.88	137	39.6	18.234***
	Parttime job	52	39.39	80	60.61	132	38.15	
	Fulltime job	24	31.16	53	68.84	77	22.25	
		M	*SD*	*M*	*SD*			t-test
Age		40.69	6.65	38.19	6.33			3.58***
Child's age		2.22	1.06	2.29	1.14			.603
No. of children		2.90	1.77	2.65	1.6			1.5
Parental stress		2.7	.64	2.32	.48			6.16***
Work centrality		3.77	.69	3.66	.53			1.65
WFC		2.52	1.03	2.23	.79			2.88**

Notes: *p <.05, **p <.01, ***p <.001

Work centrality was measured using a 10-item questionnaire (Kanungo, 1982) reflecting the extent to which work was perceived as essential and central in a person's life (e.g., "My work is an important part of my life"). Responses were rated on a 5-point Likert scale, ranging from 1 (not at all true) to 5 (very true). Higher scores indicated that work was perceived as more central in the individual's life. This scale demonstrated high reliability in previous studies (0.81; Kanungo, 1982), and Cronbach's alpha in the current study was 0.87.

Independent Variable

The parental group was measured using a single question: "Do you have a child with NDD?". Participants had to answer either "yes" (1) or "no" (0).

Demographic Questionnaire

In addition, the participants completed a demographic questionnaire with questions regarding age, gender, age of the child, number of children in the family, relationship status (yes/no), income (below average/average/above average), education level (high school/bachelor's degree/master's degree), employment status (salaried/self-employed/unemployed), and job scope (part-time/full-time or more).

Data Analysis

The data were coded and analyzed using SPSS 25 software. The statistical analysis included descriptive statistics (percentages, means, standard deviations, and ranges) and inferential statistics to test the research hypotheses. To examine the hypothesized bivariate relationships, Pearson correlations were calculated. The differences between parents of children with NDDs and parents of children without NDD diagnosis were examined using parametric tests to compare means between two populations (χ^2; t-test). To determine the predictive power of various variables on the dependent variable, multiple regression analysis was conducted. Finally, mediation and moderation were assessed using the Hayes (2017) PROCESS macro.

Results

First, we hypothesized that parents of children with NDDs would report lower levels of education and income and that they would work fewer hours. Indeed, we found that these parents had lower levels of education compared to parents of children without NDD diagnosis ($\chi^2 = 10.261, p < .01$). They also worked fewer hours ($\chi^2 = 18.234, p < .001$). The income difference between the two groups was only marginally significant ($\chi^2 = 5.721, p = .057$). This marginal effect did not result from lack of statistical power, since 346 participants were sufficient to find a medium-sized effect (1-β = 0.95).

We also hypothesized that parents of children with NDDs would report lower work centrality, higher parental stress and higher WFC compared to parents of children without NDD diagnosis. To test this hypothesis, we conducted three t-tests with the parental group as an independent variable and work centrality, WFC, and parental stress as independent variables. To adjust for multiple comparisons, we used p value of 0.017. Table 1 presents the means and SDs of each variable as a function of parental group.

As can be seen in Table 1, parents of children with NDDs showed higher parental stress, $t(348) = 6.32$, $p < 0.001$, and higher WFC, $t(348) = 2.88$, $p < 0.01$. However, the difference in work centrality did not reach significance. These effects remained significant when we used parental age, job scope and employment status as covariates.

Next, we conducted a linear regression to test the contribution of our variables to the prediction of WFC. In the first step, we entered demographic variables, including gender, age, child's age, number of children, relationship status, education and income. In the second step, we entered employment status and job scope. In the third step, a parental group was added. The fourth step included work centrality and parental stress. All these steps used the enter method. Finally, in the last step, we added the interaction of parental group with work centrality and parental stress. Here, we used the stepwise method so that only significant interaction entered the regression.

Table 2 presents the correlations between the variables in the study and Table 3 presents the regression coefficients. As can be seen from Table 2, parental group, work centrality and parental stress were all associated with WFC. As can be seen from Table 3, together, all variables explained 24.6% of the variance in WFC. In the first step, only income predicted WFC. Higher income was associated with lower WFC. In the next step, none of the employment variables were added to the prediction of WFC. However, in the third step, the parental group significantly contributed to the prediction of WFC: parenting a child with NDDs was associated with higher WFC. In the fourth step, both parental stress and work centrality were added to the prediction, with higher parental stress associated with higher WFC and greater work centrality associated with lower WFC. In this step, the child's age became significant, such that younger age was associated with higher WFC, and the parental group became

Table 2 Means, SDs, VIF and Intercorrelations

	1	2	3	4	5	6	7	8	9	10	11	12	13
1.Work-family conflict	–												
2.Gender	00	–											
3.Age	.03	00.–	–										
4.Child's age	−.04	−.13**	.13**	–									
5.Number of Children	.021	−.07	.06	.183***	–								
6.Relationship	−.00	.09*	***24.-	−.16**	.05	–							
7.Education	.035	.041	.09*	−.08	−.02	.13**	–						
8.Income	.11*	.18***	.02	.05	−.05	.11*	.16**	–					
9.Employment status	−.03	−.03	−.02	−.04	−.06	−.06	.01	− -.05	–				
10.Job scope	−.01	***18.-	02	.01	−.02	−.01	.22***	.19***	.09*	–			
11.Parental group	.15**	−.09*	.19***	−.04	.08	−.15**	−.15**	−.10	.08	−.21***	–		
12.Work centrality	.22***	07	05	-.02	.05	02.-	-.03	.08	08	−.14	.06	–	
13. Parental stress	.39***	09.-*	11.-*	−.25***	−.01	−.14**	−.02	−.04	.06	−.13*	.07	−.03	–
Mean	2.36	–	39.32	2.2	2.8	–	–	–	–	–	–	3.70	2.5
Standard Deviation	.92	–	6.6	1.1	1.4	–	–	–	–	–	–	.60	.59
Range	1–5	–	23–58	1–4	1–11	–	–	–	–	–	–	1–5	1.25–4.49
VIF		1.10	1.14	1.22	1.10	1.16	1.15	1.12	1.30	1.06	1.18	1.06	2.89

Notes: *$p < .05$, **$p < .01$, ***$p < .001$; means and SDs for dichotomous variables were omitted, their frequencies are presented in the main text

Table 3 Regression Coefficients for Work-Family Conflict (n = 346)

Variable	ΔR^2	*B*	*SE B*	95% CI for *B*		β
				LL	*UL*	
Step I: Demographics	−.002					
Gender		−.049	.12	−.29	.19	−.02
Age		.004	.01	−.01	.02	.03
Child's age		−.055	.05	−.15	.04	−.07
Education		.013	.07	−.01	.15	.01
Relationship		−.056	.16	−.36	.25	−.02
No. of children		.024	.04	−.04	.09	.04
Income		.089*	.04	.01	.17	.12
Step II: Employment	−.006					
Gender		−.04	.12	−.28	.20	−.02
Age		.004	.01	−.01	.02	.03
Child's age		−.055	.05	−.15	.04	−.07
Education		.022	.07	−.11	.16	.02
Relationship		−.067	.16	−.38	.24	−.02
No. of children		.023	.04	−.05	.09	.04
Income		.092*	.04	.01	.17	.13
Job scope		−.024	.05	−.11	.07	−.03
Employment status		−.053	.12	−.30	.19	−.02
Step III: Parent of a child with NDD	.016					
Gender		−.023	.12	−.26	.21	−.01
Age		−.001	.01	−.02	.02	−.01
Child's age		−.039	.05	−.13	.05	−.05
Education		.045	.07	−.09	.18	.04
Relationship		−.018	.16	−.33	.29	−.01
No. of children		.013	.03	−.06	.08	.02
Income		.094*	.04	.01	.17	.13
Job scope		.001	.05	.09	.09	.00
Employment status		−.092	.12	−.34	.15	−.04
Parental group		.312**	.11	.10	.52	.17
Step VI:	.212***					
Gender		−.032	.11	−.24	.18	−.02
Age		−.001	.01	−.02	.01	−.01
Child's age		−.135**	.04	−.22	-.05	−.16
Education		.017	.06	−.10	.14	.01
Relationship		.052	.14	−.22	.33	.02
No. of children		.030	.03	−.03	.09	.05
Income		.086*	.04	.01	.16	.12
Job scope		.013	.04	−.07	.10	.02
Employment status		−.063	.11	−.28	.16	-.03
Parental group		.008	.10	−.19	.20	.00
Parental stress		.689***	.08	.53	.85	.44
Work centrality		.319***	.08	.17	.47	.21
Step V: Interaction	.228***					
Gender		−.050	.11	−.26	.16	-.02
Age		−.002	.01	−.02	.01	-.02
Child's age		−.134**	.04	−.22	−.05	-.16
Education		.031	.06	−.09	.15	.03
Relationship		.048	.14	−.23	.32	.02
No. of children		.043	.03	−.02	.10	.07

Table 3 (continued)

Variable	ΔR^2	*B*	*SE B*	95% CI for *B*		β
				LL	*UL*	
Income		.083*	.04	.01	.16	.11
Job scope		.013	.04	−.07	.09	.02
Employment status		−.070	.11	−.29	.15	−.03
Parental group		.017	.10	−.18	.21	.01
Parental stress		.425***	.13	.18	.47	.27
Work centrality		.320***	.07	.18	.67	.21
Parental stress × parent group		.450**	.16	.13	.77	.22

Notes: *p <.05, **p <.01, ***p <.001; [a] 1 = male; 0 = female. [b] education—1 = high school; 2 = BA; 3 = MA; [c] family status—1 = in a relationship: 1= yes, 2= No; 2 = widowed/divorce/single; [d] income—1 = below average; 2 = average; 3 = more than average. [e] employment status—1 = salaried; 2 = employee; 3 = unemployed; [f] Job scope—1 = occasional jobs; 2 = part-time job; 3 = full-time job; [g] parent of a child with NDD—1 = yes; 2 = no. CI = confidence interval; LL = lower limit; UL = upper limit

insignificant ($p < 0.05$). Finally, in the last step, the interaction between the parental group and parental stress entered the regression.

Figure 1 presents the moderation effect of the parental group on the association between parental stress and WFC. The moderation was examined using PROCESS macro (Hayes, 2017). As can be seen from Fig. 1, both parental groups showed association between parental stress and WFC. However, this association was stronger for parents of children with NDDs ($B = 0.81$, $p < 0.001$, CI [− 1.01 to − 0.61]) than for parents of children without NDD diagnosis ($B = -0.43$, $p < 0.001$, CI [− 0.67 to − 0.18]). Note, however, that there was a slight overlap between the confidence interval values, which might suggest the slops did not differ from each other (see Cumming et al., 2012).

We also tested whether parental stress mediated the relation between parental group and WFC. The mediation was examined by means of PROCESS macro (Hayes, 2017). As expected, parental group was positively associated with parental stress ($B = 0.41$, $SE = 0.06$, $\beta = 0.68$, $p < 0.001$): parents of children with NDDs had higher stress than parents of children without NDD diagnosis. Additionally, parental stress was positively associated with WFC ($B = 0.66$, $SE = 0.08$, $\beta = 0.43$, $p < 0.001$): higher stress was associated with higher WFC. The total effect between the parental group and WFC was significant ($B = 0.26$, $SE = 0.10$, $p < 0.05$, CI [0.06 to 0.47]), whereas the direct effect was not ($B = 0.001$, $SE = 0.06$, $p = 0.99$, CI [−0.2 to 0.20]). Importantly, the indirect effect was significant ($B = 0.27$, $SE = 0.06$, CI [0.17 to 0.39]; see Fig. 2). As the confidence interval values indicated, there

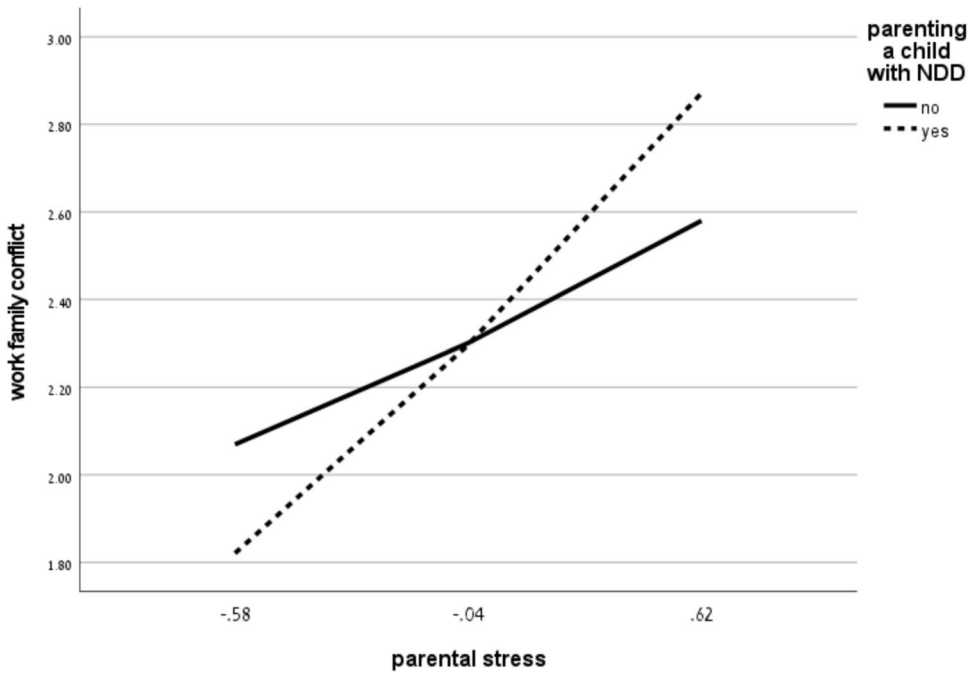

Fig. 1 The two-way interaction between parental stress and parenting a child with NDD in predicting WFC

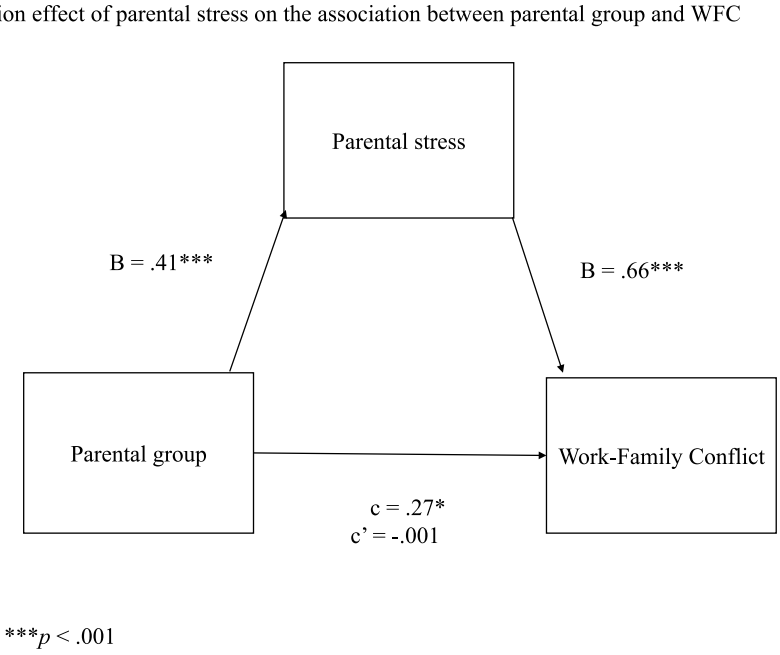

Fig. 2 The mediation effect of parental stress on the association between parental group and WFC

was a significant mediation effect, as its lower and upper bounds were not crossed by the value of zero (see Cumming et al., 2012). As predicted, parental stress mediated the relation between parental group and WFC: parents of children with NDDs tended to report higher parental stress, which in turn was positively associated with higher WFC.

Finally, we tested the mediating role of work centrality on the relation between the parental group and WFC. This mediation was not significant as the association between the parental group and work centrality did not reach significance ($B = 0.14$, $SE = 0.08$, $\beta = 0.23$, $p = 0.06$). The association between work centrality and WFC was significant ($B = -0.35$, $SE = 0.07$, $\beta = -0.24$, $p = 0.001$), with higher work centrality associated with higher WFC. More importantly, the indirect effect did not reach significant values ($B = -0.05$, $SE = 0.03$, CI [−0.12 to 0.004]).

Discussion

This study examined work-family conflict (WFC) among Israeli parents of children with neurodevelopmental disorders (NDDs) compared to parents of children without NDD diagnosis. The findings reveal differences between these groups in several key areas, such as employment, parental stress, and WFC.

First, parents of children with NDDs reported lower levels of education and income. They also work less and hold more part-time jobs compared to parents of children without NDD diagnosis. These findings indicate that having a child with NDDs is negatively associated with various aspects of the parent's employment. Our findings align with previous studies indicating that parenting children with NDDs is associated with fewer work hours, affecting income and career progression (Brown & Clark, 2017; Cidav et al., 2012; McCall & Starr, 2018; Stefanidis et al., 2023). Regarding lower levels of income and education, a national Israeli study reported similar findings for parents of children with disabilities in general (Barlev et al., 2021). We also found that parents of children with NDDs were comparatively older, while there was no difference in the children's ages. This association between parental age and the probability of bearing a child with a disability was found in previous studies as well (for a review, see Malamitsi-Puchner & Briana, 2023).

Second**,** our results show that parents of children with NDDs experience higher levels of parental stress compared to parents of children without NDD diagnosis. This finding is consistent with previous studies showing increased stress during the early years of caring for a child with a disability (Prata et al., 2019; Staunton et al., 2023). Moreover, parental stress is associated with higher WFC, while work centrality is associated with less WFC. Indeed, a previous qualitative study found that parents of a child with NDDs reported higher WFC, and attributed this to the intensive care requirements of their children and the resulting impact on their work lives (Balachandran & Bhuvaneswari, 2024).

Third, our regression analysis showed that WFC was associated with familial factors (parental stress and parental group) and not with employment factors (work status, job scope and work centrality). This contradicts previous studies that found an association between employment factors and WFC among the general population (Hill et al., 2010). It also contradicts Brown's (2014) findings regarding parents of children with NDDs; in that study, the mean

child age was 8.9 – much older than in our study. In early years, the diagnosis of NNDS is complex and parents often experience difficulties and frustration during the diagnostic process. Indeed, in previous studies, parents reported parental stress resulting from the duration of the diagnosis, the number of professionals consulted, and lack of assistance or support in the relationship with the diagnostic team (Crane et al., 2016; Sapiets et al., 2021). Therefore, parents are struggling with much more family demands during those years, which might reduce the centrality of work in their life.

Fourth, our findings reveal a significant interaction between parental stress and parental group, with a stronger association between WFC and parental stress among parents of children with NDDs. It seems that the association between parental stress and WFC is stronger for parents of a child with NDDs. This may be since having a child with NDDs can impair the career course as well as increase the need for special treatments that consume time and energy (Crettenden et al., 2014; Marquis et al., 2020). That is, the additional daily challenges faced by parents of a child with NDDs – including early symptom detection, securing appropriate care arrangements, and managing medical treatments alongside professional responsibilities – increase parental stress and WFC. The complex interplay between these factors highlights the unique stressors experienced by parents of young children with NDDs in balancing work and family obligations (Young et al., 2020).

Finally, we found that parental stress mediated the relationship between the parental group and WFC. The association between parenting a child with NDDs and parental stress is well documented. For example, comparative studies have found that parents of children with NDDs experience higher levels of parental stress compared to parents of children without NDD diagnosis (Craig et al., 2016; Gupta, 2007; Hayes & Watson, 2013). Less is known about the association between parental stress and WFC. Nevertheless, Meeussen and Van Laar (2018) found that the pressure to be a perfect mother was associated with lower WFC and lower career aspirations. Similarly, a study conducted among working parents of children with NDDs found that parental stress was associated with high WFC, especially during the COVID-19 (Balachandran & Bhuvaneswari, 2024). Though both associations have been tested before, to the best of our knowledge, this is the first study to test the mediating role of parental stress. Our finding suggests that the association between parental group and work-family conflict (WFC) tends to be stronger among parents of children with neurodevelopmental disorders (NDDs). While the DSM-5 groups ASD and intellectual disability (ID) under NDDs due to shared diagnostic criteria, it is important to note that parental stress levels and their association with work-family conflict (WFC) may still vary between families of children with ASD versus ID. However, this study did not find statistically significant differences between these subgroups.

In contrast to parental stress, work centrality did not mediate or moderate the relation between the parental group and WFC. This finding is inconsistent with previous studies, which report that support at the workplace, such as flexible hours or emotional and instrumental aid, is associated with less FWC (Matthews et al., 2011; Wright et al., 2016). It may be suggested that support in Israeli workplaces is not fully adjusted to this population, and thus did not moderate WFC. Overall, our findings suggest that in the context of parenting a child with NDD, family aspects play a more central role in than do employment aspects, especially during the child's first years. *Implications for Policy and Practice.*

WFC is a critical issue, with profound impact on family life across health, psychological, social, and occupational dimensions. Our study underscores the vulnerability of parents of children with NDDs, highlighting their increased parental stress and increased WFC. This population experiences reduction in mental well-being, potentially affecting their ability to meet their children's needs optimally (Shepherd et al., 2024).

The extent of assistance provided to reduce employment gaps among parents of children with NDDs is largely determined by a country's welfare regime. Social-democratic welfare states typically offer the most comprehensive support, including financial assistance for childcare, compensation for lost income, paid absence days, and services designed to facilitate parental employment. These measures often include flexible work hours and employer support programs (Wondemu et al., 2022).

In Israel, the welfare regime is neoliberal, which means that the government is relatively uninvolved in the labor market. Parents of children with disabilities are entitled to more hours of absence (52 per year and sometimes more), as well as more days of absence (18–36 per year) (Sick Pay (Absence Because of Child's Illness) Law, 5753–1993(1993)). They are also entitled to a disabled child allowance, as well as ancillary services (National Insurance Regulations (Disabled Child), 5770–2010). There are no differences in the labor market rights according to the child's disability characteristics or age.

Our findings highlight the critical need for policymakers to acknowledge and address the unique challenges faced by working parents of young children with NDDs, and disabilities in general. This vulnerable population requires tailored responses that go beyond conventional initiatives. Our research underscores the urgency of developing targeted support systems and interventions designed specifically for parents of children with NDDs in their first years. According to our findings, the family factor The family factor plays a much greater role in the child's first years due to the child's needs, and as a result, work centrality decreases.

Therefore, specialized initiatives should focus on helping parents navigate the complex interplay between their professional obligations and the caregiving responsibilities associated with raising a child with NDDs. By providing appropriate support such as enhancing respite care services and specialized counseling, policymakers can contribute to fostering a more balanced and sustainable lifestyle for these families. Additionally, flexible work arrangements, payment for long absences including extended leave options, or access to employee assistance programs can help parents maintain their work obligation (Chou et al., 2012; Stewart, 2013). Moreover, workplace policies that recognize the unique needs of employees caring for children with NDDs, especially in their first years, can play a crucial role in improving overall family well-being. In addition, special training programs should be developed for parents of children with NDDs, which will enable them to upgrade their professional skills and integrate better into the labor market. The current policy is insufficient and perpetuates gaps between parents of children without NDDs diagnosis and parents of children with NDDs.

Overall, a supportive and inclusive workplace contributes to work-life balance (Brown & Clark, 2017). An inclusive workplace refers to the possibility of receiving assistance and understanding from the employer, employment flexibility in working hours, and even shortening the work day with full pay (Wright et al., 2016). Note that employment flexibility and the ability to go out in the middle of the day to accompany the child to treatments is essential, because community-based support for employed parents of children with disabilities is limited, and medical services are often provided during the workday. Studies have also found that an inclusive organizational culture, such as peer support or marking workplace events during work hours rather than in the afternoon or evening, contributed to work-life balance (Stewart, 2013). By implementing such measures, organizations can not only support their employees but also potentially enhance workforce retention and productivity.

To conclude, investing in parents of children NDDs in the labor market can yield significant positive outcomes. These include not only increasing their income or reducing inequality but also improving their ability to cope with the challenges of care. This approach has the potential to create a more inclusive and supportive environment, benefiting not only parents of children with NDDs, but society as a whole.

Limitations and Future Directions

The present study has several limitations. First, the data were collected via social media. Thus, parents less active in social media might not have been exposed to this survey and the data cannot be generalized to this population. Second, since the study was cross-sectional, the directions of the associations found are speculative and do not allow for causal inferences. Third, in this study, there were more women than men in both groups, as in other studies, especially among parents of children with NDDs (Schippers et al., 2020; West & Honey, 2016). Fourth, the research was conducted in Israeli society, where women bear a double burden: both childcare and long working hours, more than their counterparts in the Western world. Future studies should be more gender balanced.

Despite these limitations, the current study shows the contribution of parenting a child with NNDs, parental stress, and work centrality to WFC in the child's first years. It suggests that the association between parental group and WFC is both mediated and moderated by parental stress, but not by work centrality. These findings suggest that when children are younger, family factors are more important. Future studies should explore this in different age groups of children with NDDs.

Conclusion

This study examined WFC among parents of children with NDDs aged 0–4, compared to parents of same-aged children without NDDs diagnosis. We also examined the role of parental stress and work centrality as mediators or mediators between parental group and WFC. The study highlights the differences between the two groups, such that parents of children with NDDs are a vulnerable population in terms of their WFC. Their employment has been affected, and they also experience greater parental stress and higher WFC due to the need for diagnoses and medical interventions in the child's first years. Moreover, parental stress plays a crucial role in predicting and mediating WFC. These findings emphasize the need for policy intervention with the population of parents of children with NDDs, especially in their first years.

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Declarations

Conflict of interests There are no competing interests.

Ethical Approval All procedures followed were by the ethical standards of the responsible committee for human experimentation (institutional and national) and with the Helsinki Declaration of 1975, as revised in 2000. Ethic Number: 1982021.

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