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## PSYCHOLOGY AND EDUCATIONAL SCIENCE



## Keep Calm and Be a Dad: Psychosocial Factors and Fathers' Emotional Well-Being

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### ABSTRACT

The aim of this study was to examine how perceived social support (PSS), parental competence (PC), and parenting styles affect Romanian fathers' psychological well-being - as indicated by symptoms of depression, anxiety, and stress - and how these relationships are moderated by marital status, levels of neuroticism, and time spent with children. Using a cross-sectional design, the research was conducted on a nonclinical sample of 106 Romanian fathers ( $M = 42.15$  years,  $SD = 7.33$ ), of whom 66 were married and 40 were divorced or separated. Participants completed an online battery of questionnaires represented by MSPSS, PSOC, PSDQ-short, IPIP-Ro neuroticism, and DASS-21. Results showed that higher perceived social support was associated with significantly lower depressive symptoms and showed smaller, context-dependent associations with anxiety and stress. Parental competence emerged as a robust predictor of reduced depression and stress, with no modulation by marital status or time spent with children. Marital status significantly moderated the link between social support and depression: the protective effect of social support was stronger among married fathers than among divorced/separated fathers.

**Keywords:** perceived social support, parental competence, parenting styles, depression, anxiety, stress, marital status, neuroticism, fathers' mental health

## 1. INTRODUCTION

Over recent decades, research has shown that active paternal involvement contributes to children's cognitive, socio-emotional, and social development (Grossmann et al., 2002; Rowe et al., 2017). At the same time, when such involvement is lacking, children's exposure to developmental and mental-health risks increases (Flouri et al., 2015; Jiang et al., 2024; Yoon et al., 2024). Moreover, studies have shown that the father's own psychological distress is a critical part of this ecology: paternal depression and related difficulties are associated with lower involvement and less optimal parenting, with related consequences for children (Ramchandani et al., 2005, 2011; Wilson & Durbin, 2010). For example, Ayer et al. (2016) found that children of depressed fathers exhibited higher levels of anxiety, depression, and aggressive behavior than children of fathers without depression.

Psychosocial resources appear central in shaping fathers' adjustment. A systematic review identified perceived social support, the partner relationship, and access to professional support as key determinants of men's emotional adaptation to the paternal role; when these are lacking, fathers report heightened stress (e.g., fatigue, irritability, social withdrawal), isolation and non-belonging, and fear of failure in the parental role (Baldwin et al., 2018).

Despite this, parenting research continues to emphasize mothers disproportionately; comprehensive data on fathers remain limited, and many assessment tools are insufficiently adapted to fathers' involvement (Schoppe-Sullivan & Fagan, 2020). The scientific understanding of fatherhood appears to be constrained by stereotyped portrayals and underrepresentation of cultural and socioeconomic diversity.

Data has shown consequences across developmental systems as a result of father absence or low-quality involvement. Father absence at age 3 predicted a higher likelihood of emotional and behavioral difficulties by age 5 (Flouri et al., 2015). Repercussions have been found at the biological level, as the absence of a biological father or the presence of a stepfather has been linked to accelerated sexual maturation in girls, with potential long-term physical and mental-health costs (Thutoemang & Oppong, 2023); findings that are consistent with a meta-analysis showing earlier menarche when biological fathers were absent in childhood ( $r = .14$ ; Webster et al., 2014). Recent research aligns with this pattern: in rural China, absent or low-quality paternal involvement is associated with elevated risks of depression and anxiety among children and adolescents, whereas high-quality, intensive involvement is protective (Jiang et al., 2025); similarly, paternal involvement low in cognitive stimulation relates to poorer socio-emotional outcomes, including reduced empathy, diminished emotional security, and higher internalizing and externalizing symptoms (Yoon et al., 2024).

These societal stakes are easily observable in the Romanian population indicators. In 2023, over 214,936 children

aged 7–17 were not enrolled in any form of primary, lower-secondary, upper-secondary, or vocational education (Ministry of Education, 2024). Early school leaving among 18–24-year-olds reached 16.6%—the highest rate in the European Union, compared to the EU average of 9.5% (European Commission, 2024)—and Romania remains among the countries with the highest proportions of below-standard performance in reading, mathematics, and science (OECD, 2024). The economic cost is substantial: approximately €15.7 billion were lost over the past 11 years due to school dropout (5.23% of Romania's annual GDP; Iliescu et al., 2024). A recent study has shown that children's literacy is tightly linked to parents' education, family reading habits, and children's reading autonomy, with parental involvement—including that of fathers—mattering most as a model of competence and attitude rather than as isolated activities (Petrescu & Iliescu, 2024).

On the other hand, research in targeted interventions have shown results. Fathers' involvement can be strengthened when programs address fathers' specific needs; these interventions have been associated with better father–child relationships, enhanced paternal emotional skills, increased parental confidence, and more positive co-parenting (Henry et al., 2020). Further data links paternal involvement with healthier child weight trajectories, better adherence to chronic-illness treatments, fewer mental-health problems, and improved language development, with unique affective and cognitive contributions that complement maternal influences; policy recommendations include integrating fathers into perinatal care, offering dedicated paternal leave, monitoring fathers' health, and countering limiting stereotypes (Yogman & Eppel, 2021).

With all this data at hand, Romanian research on parental stress and child mental health remains limited (Păsărelu et al., 2022), and evidence specific to fathers is particularly scarce: recent work highlights the need for father-centered studies to properly understand paternal contributions to parental stress and family dynamics (Rusu et al., 2025).

The present study addresses these gaps by examining associations between psychosocial factors—perceived social support, parental competence, and parenting styles—and Romanian fathers' psychological distress, while testing whether these associations are moderated by personality (with an emphasis on neuroticism), marital status (married vs. divorced/separated), and daily time spent with children.

### **Perceived Social Support (PSS)**

Perceived social support (PSS) has been documented since the 1970s as the perception of being loved, valued, and embedded in communicative networks (Cobb, 1976) and as a health-protective buffer against stress (Cassel, 1976). More recent research integrates direct effects—support benefits health regardless of stress—and buffering functions—support attenuates stress reactivity (Uchino et al., 2012; Holt-Lunstad et al., 2017; Lakey & Orehek, 2011; Thoits, 2011). Classic syntheses distinguish emotional, instrumental, informational,

and appraisal support, each differentially predictive of health outcomes (House et al., 1988).

PSS has been observed to focus on the quality of relationships and reliably predicts psychological outcomes, suggesting interventions should prioritize improving relationship quality over quantity (Yang et al., 2022). Longitudinal evidence also indicates bidirectionality: higher perceived support predicts later reductions in depressive symptoms, whereas elevated depression/PTSD symptoms forecast subsequent declines in perceived support (Thomas et al., 2022).

When it comes to parents specifically, support reduces stress and improves interaction quality; evidence spans typical families and those facing disability, where structured counseling and groups reduce parental stress (McConnell et al., 2010; Zaidman-Zait et al., 2016). Higher parental support correlates with more positive, less controlling practices linked to healthier child development (Weiss et al., 2021).

For fathers, support reduces isolation, anxiety, and depression; although men may deprioritize their own mental health and hesitate to seek help (Darwin et al., 2017). Partner and network support predict better mood in the perinatal/early parenting periods; disruptions (e.g., during COVID-19) heightened isolation, underscoring the protective role of informal ties (Bruno et al., 2020; Poulos et al., 2021). Postpartum, targeted support reduces fathers' loneliness and fosters community (Murray et al., 2024; Wells et al., 2020). Cross-cultural data similarly link embeddedness in supportive communities with fewer depressive symptoms and more positive parenting (Massoudi et al., 2016; Waller et al., 2018).

Consistent with this literature, PSS was operationalized with the Multidimensional Scale of Perceived Social Support (MSPSS), capturing support from family, friends, and significant other.

### **Parental Self-Efficacy (PSE)**

PSE refers to parents' beliefs about their capability to organize and execute the actions required in parenting; it shapes motivation, effort, persistence, and affect (Bandura et al., 1997). A systematic review shows PSE is pivotal for parents' mental health and children's adaptive development; yet the literature's mother-heavy focus suggests there is a need for father-focused work (Albanese et al., 2019). However, when father data exist, higher PSE is associated with more positive paternal attitudes and greater direct involvement (Howard, 2006; Giallo et al., 2013). At the same time, research shows there is a change in the journey of fathers as they adapt to the role: PSE typically increases—paralleling maternal findings—and supports involvement under challenge (e.g., child disability) (Pinto et al., 2016; Boyraz & Sayger, 2010). Early in fatherhood, higher neuroticism predicts lower PSE, suggesting a personality-linked vulnerability to reduced efficacy beliefs (Donithen & Schoppe-Sullivan, 2022).

### **Parental satisfaction (PS)**

While PSE and PS are correlated, they do have distinct components: PSE is efficacy-belief, whereas PS captures the affective payoff and congruence between expectations and the lived parenting role.

In this study, both are assessed with the Parenting Sense of Competence Scale (PSOC) (Johnston & Mash, 1989; Rogers & Matthews, 2004). Higher PS indicates more effective co-parenting and better couple functioning, creating beneficial transference into the parent-child relationship (Peltz et al., 2018). PS appears to be sensitive to contextual change—for example, reduced alcohol use among alcoholic fathers predicted improvements in PS across treatment (Watkins et al., 2009). Among nonresident fathers, perceived partner support and PSE help explain links between fathers' satisfaction with their own parenting and children's perceptions of paternal involvement (Caldwell et al., 2013).

To be noted, going forward: PSE and PS are used consistently and refer to their joint measurement via PSOC.

### **Parenting Styles**

Parenting styles are theorized as stable configurations of attitudes and behaviors through which parents influence children; the best-known framework distinguishes authoritative, authoritarian, and permissive styles along the axes of demandingness and responsiveness (Baumrind, 1966, 1971). This view later was extended to include a neglectful style (low on both axes) within a two-dimensional model (Maccoby & Martin, 1983). Conceptually, styles function as a psychosocial context that shapes the effectiveness of specific parenting practices; the authoritative style is most frequently linked to positive outcomes – however, culture and family socialization goals are a criterion, hence the importance of distinguishing styles from practices (Darling & Steinberg, 1993). Another key differentiator is the contrast between behavioral control (generally adaptive) and psychological control (detrimental to socio-emotional development) (Barber, 1996, 2005).

Data shows that beyond effects on children; styles relate to parents' functioning. Among fathers, authoritarian and permissive patterns are associated with lower perceived parenting competence and greater dysregulation, with implications for both father and child (Carbone et al., 2024). Intergenerational findings suggest that fathers exposed to controlling, unaffectionate parenting are less supportive of their children's negative emotions and show weaker emotion regulation—which in fact is an empirical pattern showing Belsky's process model linking family-of-origin experiences to parental characteristics and resources (Belsky, 1984; Yan et al., 2016). Meta-analytic and cross-national reviews also suggest gendered differences: on average, mothers display more responsiveness, involvement, and authoritative behaviors, whereas fathers are perceived as more authoritarian and less engaged in affective socialization (Yaffe, 2020).

## Neuroticism

Neuroticism is viewed as a stable tendency to experience intense negative affect; showing longitudinal links to psychological distress and functions as a transdiagnostic risk factor (Lahey, 2009; Jeronimus et al., 2016). This goes beyond mental health, as higher neuroticism relates to poorer physical-health outcomes, including shorter lifespan and more somatic complaints (Hill et al., 2019; Vassend et al., 2017).

In parenting, elevated neuroticism has been associated with greater distress and instability under stress (e.g., COVID-19 lockdowns), whereas profiles marked by higher emotional stability are associated with more effective parenting behaviors; meta-analytic evidence links lower neuroticism and higher agreeableness to greater parental warmth (Mazza et al., 2020; McCabe, 2014; Prinzie et al., 2009). Between generations, parental neuroticism predicts maladaptive coping and children's emotional dysregulation via mechanisms such as rumination (Sachs-Ericsson et al., 2014). As the diathesis–stress view suggests, neuroticism has been found to amplify the impact of stressors rather than operating as a direct cause: daily-diary work shows moderation of stressor–outcome links under high-stress days, and in parents, neuroticism magnifies effects of marital conflict on parental burnout (Donithen & Schoppe-Sullivan, 2022; Neupert et al., 2008).

Accordingly, in this study, neuroticism was modeled as a moderator of predictor–distress associations, anticipating stronger effects at higher trait levels.

## Marital Status

Marital status appears to moderate the dynamics between psychosocial resources and parents' emotional outcomes. Relative to unmarried/divorced/widowed adults, married individuals show a stronger association between social support and happiness, indicating amplified benefits of support in marriage (Yuan, 2024). Differences seem to persist across generations: when children reach adulthood, unmarried (vs. married) fathers report less contact, support, and relationship quality, suggesting durable status-linked gaps in paternal involvement (Fingerman et al., 2020). However, studies have shown that higher paternal involvement during marriage predicts better father–child ties after divorce, while divorced fathers' ongoing engagement appears to be shaped by cooperative co-parenting with former partners (DeGarmo & Forgatch, 2011; Kalmijn, 2015).

Data also suggest that contextual work factors intersect with status pathways. Job satisfaction in fathers relates to more constructive parenting, whereas work stress can elicit compensatory maternal behaviors, underscoring dynamic, family-system adjustments that vary by marital context (Gong et al., 2024; Ju et al., 2023).

## Psychological distress

Psychological distress is conceptualized as a dimensional grouping of depression, anxiety, and stress

(Lovibond & Lovibond, 1995a). Contemporary transdiagnostic models hypothesize a shared general distress factor with differentiating components (Clark & Watson, 1991), and quantitative syntheses support an integrated spectrum rather than fully discrete categories (Kotov et al., 2017). Although the DSM-5 retains categorical diagnoses, it incorporates severity specifiers, consistent with dimensional assessment in research (APA, 2013; Insel et al., 2010).

Keeping with this framework, fathers' distress shows contextual links. During the transition to fatherhood, depressive symptoms often increase, particularly among younger fathers (Garfield et al., 2014). Family ecology seems to influence the outcome: child sleep problems are associated with poorer overall health and well-being in fathers, with weaker correlations to paternal depressive symptoms than those observed in mothers (Coles et al., 2022). Research suggests neuroendocrine adaptations: testosterone commonly declines after birth and is associated with greater caregiving and higher marital satisfaction, while cortisol displays time-sensitive, bidirectional associations with parental engagement across the perinatal period (Storey et al., 2020). From a public-health perspective, paternal postpartum depression has an estimated prevalence of 24.06% in the first year after birth (peaking in the first three months), and risk is elevated by prior mental-health history, unemployment/financial strain, couple dysfunction, maternal depression, and perceived stress (Ansari et al., 2021; Dhanpal & Shil, 2024).

Treating distress as a dimensional construct comprising depression, anxiety, and stress justifies the use of continuous DASS-21 outcomes and supports analyzing fathers' distress as a coherent risk profile shaped by psychosocial resources and contexts.

All the above considered, the following hypotheses were considered:

H1. *A higher level of Perceived Social Support (PSS) predicts a decrease in fathers' psycho-emotional distress (measured by the DASS subscales—Depression, Anxiety, and Stress) over and above the variance explained by secondary psychosocial variables: Perceived Parental Competence (PC), Authoritative/Democratic Parenting Style (SPe), and Authoritarian Parenting Style (SPn).* Following the assessment of Cronbach's alpha, the Permissive Parenting Style showed low internal consistency and was therefore excluded from hypothesis testing on grounds of insufficient reliability.

H2. *Marital status (D6) moderates the relationship between PSS and fathers' psycho-emotional distress (DASS—Depression, Anxiety, Stress).*

H2a. *The PSS–Depression, PSS–Anxiety, and PSS–Stress relationships are expected to be stronger among divorced/separated fathers.*

H3. *Marital status (D6) moderates the relationship between PC and fathers' psycho-emotional distress (DASS—Depression, Anxiety, Stress).*

H3a. The PC–Depression, PC–Anxiety, and PC–Stress relationships are expected to be stronger among divorced/separated fathers.

H4. Neuroticism moderates the relationships between PSS and fathers' psycho-emotional distress (DASS–Depression, Anxiety, Stress).

H4a. The PSS–Depression, PSS–Anxiety, and PSS–Stress relationships are expected to be stronger at higher levels of Neuroticism.

H5. Neuroticism moderates the relationships between PC and fathers' psycho-emotional distress (DASS–Depression, Anxiety, Stress).

H5a. The PC–Depression, PC–Anxiety, and PC–Stress relationships are expected to be stronger at higher levels of Neuroticism.

## 2. METHOD

### Participants and procedure

A number of 106 Romanian fathers from a non-clinical community sample were analyzed; they completed all measures and demographics (age 28–78,  $M = 42.15$ ,  $SD = 7.33$ ). Most fathers were in urban areas (93 urban, 13 rural areas).

In terms of education, a large proportion of the respondents were at least university-level educated: high school 22 (20.75%), bachelor 49 (46.22%), master 32 (30.18%), PhD 3 (2.83%). Professionally, 67 were full-time employees, 4 part-time, 30 self-employed (13 freelance, 17 entrepreneurs), 3 unemployed, and 2 retired. At the time of the study the participants were split: 66 married (62.3%), 40 divorced/separated (37.7%).

Time with children in the full sample was:  $<1$  h/day = 15 fathers (14.1%), 1–2 h/day = 20 (18.8%), 2–4 h/day = 37 (34.9%), and  $>4$  h/day = 34 (32.1%). Stratified by marital status, clear differences emerged: among married fathers, 37.9% reported  $>4$  h/day and 31.8% reported 2–4 h/day; among divorced/separated fathers, only 22.5% reported  $>4$  h/day, while 40% fell in the 2–4 h/day range. Divorced/separated fathers were also more likely to spend  $<1$  h/day (20%) than married fathers (10.6%). These contrasts justify modeling “daily time with children” as a potential moderator of links between psychosocial factors and paternal distress.

Recruitment used voluntary online self-selection (father-focused communities/direct outreach via WhatsApp, Instagram, Facebook, TikTok). Data were collected 25 March–06 May 2025 via anonymous Google Forms with digital informed consent; non-consenting respondents were exited automatically (1 exclusion). Mandatory responses yielded 0% missing data.

### Measures

*Psychological distress* (DV) was measured with DASS-21–Depression, Anxiety, Stress; Romanian validation reported by Albu (2011). Internal consistency for this study was: Depression  $\alpha = .89$ , Anxiety  $\alpha = .87$ , Stress  $\alpha = .86$ .

H6. Time spent with children moderates the relationship between PSS and fathers' psycho-emotional distress (DASS–Depression, Anxiety, Stress).

H6a. The PSS–Depression, PSS–Anxiety, and PSS–Stress relationships are expected to be stronger at higher levels of time spent with children.

H7. Time spent with children moderates the relationship between PC and fathers' psycho-emotional distress (DASS–Depression, Anxiety, Stress).

H7a. The PC–Depression, PC–Anxiety, and PC–Stress relationships are expected to be stronger at higher levels of time spent with children.

*Perceived social support* (primary IV) was measured using MSPSS (Zimet et al., 1988; Romanian validation Alexe et al., 2021). Internal consistency for this study was: total  $\alpha = .94$ ; Family  $\alpha = .94$ , Friends  $\alpha = .95$ , Significant Other  $\alpha = .97$ .

*Parental competence* (secondary IV) was measured with PSOC (Johnston & Mash, 1989). PSOC items were translated to Romanian and lightly adapted for father-specific wording; six items were edited (Items 5, 6, 13, 14, 15, 17); e.g., “If being a father were more interesting...”, preserving construct meaning; internal consistency remained adequate (Total  $\alpha = .85$ ; Efficacy  $\alpha = .83$ ; Satisfaction  $\alpha = .80$ ).

*Parenting styles* were assessed with the short form of the Parenting Styles and Dimensions Questionnaire (PSDQ-short; Robinson et al., 2001), which measures three dimensions aligned with Baumrind's typology—authoritative (15 items), authoritarian (12 items), and permissive (5 items)—operationalized on the axes of demandingness and responsiveness (Baumrind, 1966, 1971; see also Oliveira et al., 2018). The instrument was translated by the author, and its internal consistency was evaluated on the present Romanian sample. Original validation reported  $\alpha = .86$  (authoritative),  $\alpha = .82$  (authoritarian),  $\alpha = .64$  (permissive). In this study, internal consistencies were authoritative  $\alpha = .88$ , authoritarian  $\alpha = .82$ , permissive  $\alpha = .52$ ; a total score  $\alpha = .85$  is also reported in the thesis. Given the low reliability of the permissive subscale ( $\alpha = .52$ ), it was excluded from all inferential analyses.

### Design and analysis

The research was designed as an observational, correlational, cross-sectional study. The questionnaire was via online administration, and there was no manipulation or randomization. Analyses comprised hierarchical regressions for incremental validity and moderation models with interaction terms and simple-slope probes for hypothesized moderators.

## Power analysis

An a-priori multiple-regression power analysis (pwr, R) indicated N = 123; the final N = 106 was slightly below target,

but adequate for medium-large effects in this design; small effects should be interpreted cautiously.

## 3. RESULTS

### Descriptives, reliability, and missing data

All 106 participants were fathers recruited via voluntary online self-selection. No missing data was recorded (mandatory responses). Internal consistencies were adequate across constructs (as shown on Table 1's diagonal; DASS Depression .89, Anxiety .87, Stress .86; MSPSS Total .94; PSOC Total .85; PSDQ Authoritative .88, Authoritarian .82; Permissive .52). Given the low  $\alpha$  for Permissive, that subscale was excluded from inferential tests.

### Correlations

As anticipated, fathers reporting more perceived social support (PSS) and higher parental competence (PC/PSOC)

showed lower distress: DASS total correlated with PSS ( $\rho = -.35, p < .001$ ) and PC ( $\rho = -.63, p < .001$ ). Neuroticism correlated positively and strongly with DASS ( $\rho = .77, p < .001$ ). Parenting styles aligned with the expected pattern: Authoritative related negatively to DASS ( $\rho = -.27, p < .01$ ), Authoritarian positively to DASS ( $\rho = .24, p < .05$ ). Marital status correlated negatively with PSS ( $\rho = -.20, p < .05$ ), and time with children correlated negatively with DASS ( $\rho = -.36, p < .001$ ). MSPSS and PSOC subscales intercorrelated  $< .80$ , supporting simultaneous use in regression.

**Table 1**

*Descriptive statistics and Spearman correlations among study variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1.DASS	(.95)															
2. DAD	.92***	(.89)														
3. DAA	.83***	.65***	(.87)													
4. DAS	.94***	.79***	.74***	(.86)												
5. PSS	-.35***	-.44***	-.16†	-.28***	(.94)											
6. PSSF	-.42***	-.49***	-.20†	-.38***	.85***	(.94)										
7. PSSR	-.24***	-.32***	-.11	-.18*	.77***	.52***	(.95)									
8. PSSS	-.30***	-.38***	-.17	-.22*	.85***	.73***	.44***	(.97)								
9. PC	-.63***	-.64***	-.45***	-.59***	.40***	.51***	.29***	.29***	(.85)							
10. PCE	-.43***	-.45***	-.31***	-.42***	.22***	.37***	.15*	.12	.78***	(.83)						
11. PCS	-.64***	-.64***	-.46***	-.59***	.42***	.48***	.33***	.32***	.91***	.48***	(.80)					
12. SPe	-.27**	-.30**	-.21*	-.21*	.18†	.23*	.20*	.09	.44***	.46***	.32***	(.88)				
13. SPn	.24***	.23***	.10	.28**	-.13†	-.19*	-.14	.00	-.43***	-.33***	-.40***	.32***	(.82)			
14. N	.77***	.79***	.56***	.72***	-.48***	-.55***	-.31***	-.40***	-.82***	-.60***	-.77***	-.40***	.38***	(.92)		
15. D6	.05	.04	.13	.00	-.20*	-.17†	.06	.01	-.32***	.08	.03	.27***	-.23**	-.01		
16. D12	-.36***	-.33***	-.37***	-.30***	.03	.07	.04	-.01	.17†	.07	.24**	-.15	.24**	.05		
M	13.50	4.75	2.89	5.87	63.29	21.33	20.37	21.59	74.92	37.22	37.71	65.08	20.12	25.58	1.38	2.85
SD	10.89	4.43	3.42	4.02	17.74	6.92	6.82	7.78	11.86	5.64	8.05	7.04	5.26	8.86	.49	1.03

*Note.* Internal consistency coefficients (Cronbach's  $\alpha$ ) appear on the diagonal (in parentheses). Correlations are Spearman's  $\rho$ . Ordinal codings: D6 (Marital status) = 1 Married, 2 Divorced/Separated; D12 (Daily time with child) = 1 <1 h, 2 1–2 h, 3 2–4 h, 4 >4 h. DASS = Depression, Anxiety, and Stress (total score; DASS-21); DAD = DASS–Depression; DAA = DASS–Anxiety; DAS = DASS–Stress. PSS = Perceived Social Support (MSPSS total); PSSF = PSS–Family; PSSR = PSS–Friends; PSSS = PSS–Significant Other. PC = Parenting Competence (PSOC total); PCE = Parental Efficacy; PCS = Parental Satisfaction, SPe = Parenting Style—Authoritative; SPn = Parenting Style—Authoritarian. N = Neuroticism; M = Mean; SD = Standard deviation. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

**Table 2**  
*Moderators descriptions*

Moderator	Categories	n	%
Marital Status	Married	66	62,3 %
	Divorced / Separated	40	37,7 %
Time spent with children / day	< 1 h (< 7 h/week)	15	14,1 %
	1-2 h ( $\approx$ 7-14 h/week)	20	18,8 %
	2-4 h ( $\approx$ 14-28 h/week)	37	34,9 %
	> 4 h (> 28 h/week)	34	32,1 %

### Predictor operationalization (parsimony)

For parsimony, we modeled perceived social support and parenting competence with their total scores (MSPSS-Total; PSOC-Total), as subscales did not provide meaningful incremental variance and increased model complexity without improving fit (VIFs < 1.3).

Comparisons favored PSS total over its sources ( $\beta = -.12$ ,  $p = .023$ ;  $\Delta R^2 = .032$ ; VIF < 1.3). Within PC, Satisfaction contributed beyond Efficacy (Satisfaction  $\beta = -.61$ ,  $p < .001$ ; Efficacy  $\beta = -.21$ ,  $p = .258$ ). Inferential models therefore used PSS total and PC total, matching the study plan.

### Inferential Statistical Analysis

All analyses were conducted in RStudio 2025.05.0+496 “Mariposa Orchid” running R 4.3.2 (R Core Team, 2024). Packages used for the statistical analysis: openxlsx (v4.2.8) for Excel export; readxl (v1.4.5) for .xlsx import; psych (v2.5.3) for descriptives and Cronbach's  $\alpha$ ; car (v3.1-3) for recoding and collinearity diagnostics (VIF, tolerance); Hmisc (v5.2-3) for Spearman correlation matrices; lavaan (v0.6-19) for hierarchical regression and modeling; ggplot2 (v3.5.2) for statistical visualizations (histograms, Q–Q plots); dplyr (v1.1.4) and tidyr (v1.3.1) for data wrangling; pwr (v1.3-0) for power analysis.

Perceived Social Support (PSS) showed incremental predictive value for Depression only beyond Parenting

Competence (PC) and parenting styles ( $\beta = -0.061$ ,  $p < .01$ ;  $\Delta R^2 = .049$ ).

Marital status moderated PSS–Depression (interaction  $b_3 = 0.086$ ,  $p = .048$ ): the protective slope was stronger for married fathers ( $b = -0.156$ ,  $p < .001$ ) than for divorced/separated ( $b = -0.070$ ,  $p = .028$ ); no moderation emerged for Anxiety or Stress.

PC showed robust main effects (e.g., Depression  $b = -0.364$ ,  $p < .001$ ; Stress  $b = -0.246$ ,  $p = .003$ ), without moderation by marital status or time with child.

Time with child moderated PSS–Anxiety (interaction  $b_3 = 0.032$ ,  $p = .033$ ): PSS was protective up to 1–2 h/day (D12=1:  $b = -0.091$ ,  $p = .001$ ; D12=2:  $b = -0.059$ ,  $p = .002$ ) but not beyond 2 h/day.

The PSS  $\times$  Neuroticism interaction was significant for Stress at the model level ( $b_3 = -0.004$ ,  $p = .005$ ) but simple slopes were non-significant; for Depression, the interaction was non-significant ( $p = .138$ ) though the simple slope indicated protection at high Neuroticism ( $p = .044$ ).

Interactions with PC  $\times$  Neuroticism were uniformly non-significant.

Following these main findings, H1, H2 and H4 are detailed in the following paragraphs.

**Table 3**  
*Incremental validity of a PSS over PC and Authoritative and Authoritarian Parenting Styles (H1)*

Step	Predictor	Depression			Anxiety			Stress		
		$\beta$	R <sup>2</sup>	$\Delta R^2$	$\beta$	R <sup>2</sup>	$\Delta R^2$	B	R <sup>2</sup>	$\Delta R^2$
1	PC	-.229***			-.097**			-.200***		
	SPe	-.013	.380	-	-.071	.162	-	-.0003	.361	-
	SPn	-.013			-.031			.017		
2	PC	-.191***			-.082*			-.178***		
	SPe	-.017	.429	.049	-.072	.175	.013	-.002	.382	.021
	SPn	-.012			-.031			.018		
	PSS	-.061**			-.024			-.036		

Note. PSS = Perceived Social Support; PC = Parenting Competence; SPe = Parenting Style—Authoritative (Authoritative/Democratic); SPn = Parenting Style—Authoritarian. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

PSS contributed incremental variance only for Depression ( $\beta = -0.061$ ,  $p < .01$ ;  $\Delta R^2 = .049$ ). For Anxiety and Stress, PSS did

not add significant variance. SPe and SPn were not significant in any model. H1 supported for Depression only.

**Table 4**

*Moderation of Marital Status (D6) in the Relationship Between Perceived Social Support (PSS) and Depression (DAD) (Marital status D6  $\times$  PSS moderation on distress)*

Effect	B	SE	95% CI		p
			LL	UL	
PSS	-.242	.067	-.313	-.171	< .001
D6	-6.172	2.806	-11.523	-.821	.028
PSS $\times$ D6	.086	.043	.003	.169	.048
Simple slope (mar.)	-.156	.029	-.213	-.099	< .001
Simple slope (div.)	-.070	.032	-.131	-.009	.028

Note: PSS = Perceived Social Support; D6 = Marital Status; Simple slope (mar.) = effect for married fathers; Simple slope (div.) = effect for divorced/separated fathers.

In the Depression model, PSS showed a significant main effect ( $b_1 = -.242$ ,  $SE = .067$ , 95% CI  $[-.313, -.171]$ ,  $p < .001$ ) and marital status (D6) was also significant ( $b_2 = -6.172$ ,  $SE = 2.806$ , 95% CI  $[-11.523, -.821]$ ,  $p = .028$ ). Rather unexpected, the PSS  $\times$  D6 interaction was significant ( $b_3 = .086$ ,  $SE = .043$ , 95% CI  $[0.003, 0.169]$ ,  $p = .048$ ), with simple slopes indicating stronger protection among married fathers (D6 = 1:  $b = -.156$ ,  $SE = .029$ , 95% CI  $[-.213, -.099]$ ,  $p < .001$ ) than among divorced/separated fathers (D6 = 2:  $b = -.070$ ,  $SE = .032$ , 95% CI  $[-.131, -.009]$ ,  $p = .028$ ).

By contrast, in the Anxiety model PSS ( $b_1 = -.095$ ,  $p = .096$ ), D6 ( $b_2 = -1.763$ ,  $p = .461$ ), and their interaction ( $b_3 =$

$.032$ ,  $p = .388$ ) were non-significant, though simple slopes suggested protection only among married fathers ( $b = -.063$ ,  $p = .012$ ) and not among divorced/separated ( $b = -.031$ ,  $p = .260$ ). Similarly, for Stress, neither PSS ( $b_1 = -.102$ ,  $p = .110$ ), nor D6 ( $b_2 = -1.308$ ,  $p = .627$ ), nor the interaction ( $b_3 = .009$ ,  $p = .826$ ) reached significance, even though simple slopes were protective in both groups (married:  $b = -.093$ ,  $p = .001$ ; divorced/separated:  $b = -0.084$ ,  $p = .007$ ).

Overall, H2 was supported only for Depression, and H2a was not supported (the effect was stronger among married, not divorced/separated).

**Table 5**

*Moderating effect of Neuroticism on the relationship between Perceived Social Support and Depression (Neuroticism  $\times$  PSS)*

Effect	B	SE	95% CI		p
			LL	UL	
PSS	.038	.045	-.050	.126	.400
N	.512	.098	.320	.704	<.001
PSS $\times$ N	-.002	.002	-.006	.002	.138
Simple slope (N+)	.038	.019	-.075	-.001	.044
Simple slope (Nm)	-.020	.017	-.053	.013	.219
Simple slope (N-)	-.000	.023	-.045	.045	.990

Note: PSS = Perceived Social Support; N = Neuroticism; Simple slope (N+) = effect at high Neuroticism; Simple slope (Nm) = effect at medium Neuroticism; Simple slope (N-) = effect at low Neuroticism.

For Depression, PSS showed no main effect ( $b_1 = .038$ ,  $p = .400$ ), Neuroticism was positive and significant ( $b_2 = .512$ ,  $p < .001$ ), and the interaction was non-significant ( $b_3 = -.002$ ,  $p = .138$ ). Simple slopes indicated a significant PSS effect at high N ( $.038$ , 95% CI  $[-.075, -.001]$ ,  $p = .044$ ), but not at medium ( $p = .219$ ) or low N ( $p = .990$ ).

For Anxiety, neither PSS ( $b_1 = .066$ ,  $p = .172$ ) nor the interaction ( $b_3 = -.002$ ,  $p = .145$ ) was significant; all simple slopes were ns.

For Stress, PSS ( $b_1 = .109$ ,  $p = .013$ ) and N ( $b_2 = .587$ ,  $p < .001$ ) were significant, and PSS  $\times$  N was significant at the model level ( $b_3 = -.004$ ,  $p = .005$ ), yet all simple slopes were ns (high N:  $p = .078$ ; medium:  $p = .977$ ; low:  $p = .092$ ), warranting cautious interpretation.

Overall, data analysis suggests partial support for H4 (model-level interaction for Stress; Depression shows a significant simple slope at high N despite a non-significant interaction)..



## 4. DISCUSSIONS

For Depression, the pattern in which perceived social support (PSS) operated primarily as a contextual buffer, with a stronger association among married fathers, is consistent with classic social integration and marital resource models. In this sample, the stronger slope for married fathers ( $b = -.156$ ) compared to divorced/separated fathers ( $b = -.070$ ) suggests that marriage functions not only as a formal status, but as an anchor for more stable, integrated networks of support - emotional, instrumental, and normative. This aligns with Umberson's (1992) view of marriage as a key context through which individuals become embedded in social ties that regulate health-related behaviors and emotions, as well as with Amato's (2014) synthesis indicating that married adults tend to report better mental health than non-married counterparts partly because of denser and more reliable support structures. Within this framework, the weaker association between PSS and depression among divorced/separated fathers can be interpreted as a sign that their supportive networks are either more fragile, more fragmented (e.g., split between family of origin, ex-partner, and new partners), or less accessible in day-to-day parenting demands. Even when these fathers perceive support, its actual availability and mobilizability in moments of distress may be reduced, which could dilute its protective impact on depressive symptoms. This interpretation is also compatible with broader evidence that high-quality, embedded social relationships have robust protective effects on mental health (House et al., 1988; Holt-Lunstad et al., 2017), but that these effects are contingent on relationship stability and role security - dimensions that are often challenged post-divorce (DeGarmo & Forgatch, 2011; Kalmijn, 2015).

By contrast, parental competence (PC) emerged as a robust and status-invariant predictor of lower depressive symptoms ( $b = -.364$ ,  $p < .001$ ). This pattern reinforces the idea - central in the parental self-efficacy literature - that internalized beliefs of competence and satisfaction in the parental role function as intrapsychic buffers against distress (Albanese et al., 2019; Bandura et al., 1997; Jones & Prinz, 2005). Because PC reflects a relatively stable cognitive-affective appraisal ("I can handle parenting challenges"), it may protect fathers from hopelessness and self-blame even when external conditions (relationship status, time constraints, economic stress) are not optimal. The fact that PC predicted depression similarly in married and divorced/separated fathers suggests that it captures a resource that is less dependent on marital context and more closely tied to personal mastery, problem-solving, and meaning-making in the father role. This is also consistent with studies showing that higher parenting self-efficacy is associated with better parental adjustment and lower psychopathology across diverse family structures (Albanese et al., 2019; Donithen & Schoppe-Sullivan, 2022; Giallo et al., 2012;).

For Anxiety, the significant time  $\times$  PSS interaction ( $b_3 = .032$ ,  $p = .033$ ) indicates a more nuanced picture: when fathers

spend relatively little daily time with their children ( $\leq 2$  hours/day), higher PSS is associated with lower anxiety, but this protective link essentially disappears once daily involvement exceeds 2 hours. One plausible interpretation is a demand-saturation mechanism. At lower levels of hands-on involvement, fathers' anxiety may be more sensitive to general perceptions of being supported by partner, extended family, or friends - PSS helps them feel less alone with their worries about parenting, work-family balance, and financial responsibilities. However, as involvement intensifies and fathers spend more time in direct contact with children, the emotional and regulatory demands of caregiving (managing conflicts, school demands, behavioral difficulties, daily routines) may become more salient drivers of anxiety than global, trait-like perceptions of support. In other words, once fathers are heavily involved, anxiety may be shaped more by moment-to-moment emotion regulation challenges and child-related stressors (Moed et al., 2016; Păsărelu et al., 2022) than by the more distal sense of "having people I can count on." This is congruent with research showing that high involvement, while generally beneficial for children, can expose parents to more intense emotional reciprocity and stress (Ju et al., 2023; Moed et al., 2016), so that perceived support becomes a less discriminating factor: even well-supported fathers may feel anxious when daily demands are high and continuous. Another, complementary reading is that highly involved fathers may already be mobilizing their support networks to the maximum, so variance in PSS reflects less "additional" buffering and more a background condition.

For Stress, the PSS  $\times$  Neuroticism interaction reached significance at the model level ( $b_3 = -.004$ ,  $p = .005$ ), but subsequent simple-slope analyses were non-significant, suggesting a trend rather than a stable, well-powered moderation effect. The direction of the interaction—stronger protective associations of PSS at higher levels of neuroticism—is nevertheless coherent with vulnerability-amplification and diathesis-stress perspectives (Monroe & Simons, 1991). These frameworks propose that individuals high in neuroticism are more reactive to stressors but also, under some conditions, more responsive to supportive or protective contexts. Meta-analytic and longitudinal work has shown that neuroticism confers sustained vulnerability to internalizing problems (Jeronimus et al., 2016), and that daily stressors have a stronger impact on well-being and cognitive functioning among highly neurotic adults (Neupert et al., 2008). In this light, the current pattern tentatively suggests that for fathers who are dispositionally prone to negative affect, perceived social support may be particularly consequential in attenuating stress responses. However, given the limited power and non-significant simple slopes, this interpretation should be regarded as provisional and in need of replication in larger father samples, ideally with repeated-measures designs that can more precisely track stress reactivity as a function of personality and support.

Across all three outcomes, parental competence again showed a consistent, status- and time-independent protective role (for Stress:  $b = -.246$ ,  $p = .003$ ). This converges with a competence-linked coping account: fathers who perceive themselves as capable, effective, and satisfied in their parenting role may appraise stressors as more manageable, engage more readily in problem-focused coping, and experience less chronic physiological activation in response to parenting challenges (Albanese et al., 2019; Jones & Prinz, 2005). In addition, higher PC is likely intertwined with more constructive parenting behaviors (e.g., warmth, structure, less coercive discipline; Darling & Steinberg, 1993; Johnston & Mash, 1989), which in turn reduce child behavior problems and the frequency of emotionally taxing parent-child interactions—a dynamic that has been documented in both mothers and fathers (Giallo et al., 2012; Păsărelu et al., 2022). Taken together, the present findings suggest that while contextual resources such as marital status and perceived social support shape how fathers experience depression, anxiety, and stress, intrapsychic resources such as parental competence exert a broad, cross-contextual protective influence. This supports the idea that interventions for fathers' mental health might need a dual focus: strengthening social connectedness and relational stability on the one hand, and enhancing fathers' sense of efficacy and mastery in their parenting role on the other.

### **Conclusion and practical implications**

In Romanian fathers, PSS offers incremental protection against depressive symptoms, amplified in marriage and most evident for anxiety when daily contact is low; PC delivers broad, moderator-independent protection against Depression and Stress. Neuroticism covaries strongly with distress, with only tentative moderation of PSS effects. Together, these findings support dual-track interventions—network-oriented supports and competence-building—attuned to Romanian family contexts.

The results of this study offer several important implications for father-focused interventions, family support programs, and mental health practitioners working with diverse family structures.

First, the finding that perceived social support (PSS) operates as a stronger buffer for depression among married fathers compared to divorced/separated fathers underscores the need for relationship-sensitive intervention models. Practitioners should recognize that fathers experiencing marital dissolution often lose access to stable, embedded support networks, making them more vulnerable to depressive symptoms despite reporting moderate levels of support. Programs designed for divorced or separated fathers might therefore prioritize rebuilding social networks, strengthening ties with peers, extended family, and father-support groups, and providing structured opportunities for interpersonal connection. From a policy perspective, this suggests value in community

infrastructures that actively facilitate social integration for non-residential or separated fathers.

Second, the consistently strong association between parental competence (PC) and lower levels of depression, anxiety, and stress across all demographic and contextual categories suggests that father-focused mental health programs should directly target parenting self-efficacy. Skills-based approaches—such as guided mastery experiences, modeling of effective parenting strategies, and feedback mechanisms that reinforce agency—may be particularly beneficial. Because PC is an intrapsychic resource relatively independent of marital status or daily childcare load, it represents a promising universal intervention target. Parenting programs that validate fathers' efforts, highlight progress, and emphasize strengths-based approaches are likely to promote psychological resilience and reduce internalizing symptoms.

Third, the time  $\times$  PSS interaction for anxiety indicates that fathers who spend more than two hours per day in hands-on caregiving may experience anxiety driven primarily by immediate regulatory and emotional demands, rather than by broad perceptions of support. This implies that interventions for highly involved fathers should include emotion regulation training, stress-inoculation strategies, and micro-skills for real-time parenting challenges (e.g., de-escalation, co-regulation with young children). For these fathers, enhancing global social support may be less impactful than providing situational coping tools that can be deployed during demanding caregiving episodes. Father-inclusive clinical settings should therefore incorporate components such as mindfulness for parenting, cognitive reframing for challenging child behaviors, and structured routines that reduce decision fatigue.

Fourth, the tentative PSS  $\times$  Neuroticism moderation for stress suggests that fathers high in neuroticism may be especially responsive to increases in perceived support. This offers a strategic entry point for clinicians: fathers with dispositional vulnerability might benefit from therapies that bolster their perception and utilization of support, such as interpersonal therapy (IPT), acceptance-based approaches, or interventions that strengthen help-seeking attitudes. Even if the moderation was not robustly significant in simple-slope analyses, the pattern points toward a differential susceptibility model, whereby highly neurotic fathers may show the greatest gains from improved relational environments. Screening for neuroticism in fatherhood or family programs could help tailor support intensity and format.

Finally, these findings collectively indicate that fatherhood interventions should move beyond a one-size-fits-all model. Programs must be context-aware (considering marital status and caregiving load), person-centered (accounting for personality factors such as neuroticism), and resource-oriented (mobilizing both external support networks and internal competence beliefs). Policymakers and family service providers should recognize fathers as active agents within family systems and design supports that fortify both relational embeddedness

and personal efficacy. The stability, well-being, and adjustment of fathers—whether married, separated, highly involved, or personality-vulnerable—ultimately contribute to healthier developmental contexts for children and more resilient family systems overall.

### Limitations

Self-report, cross-sectional data invite shared-method variance, desirability bias, and no causal ordering. The voluntary online, urban-leaning sample (N = 106) limits generalizability and reduces sensitivity to small interactions; single-item moderators (status, time) preclude internal consistency estimates.

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### Future directions

Extending the psychosocial ecology with financial stress/support, community resources (peer groups), and access to counseling would broaden the understanding of Romanian fathers. Adopting multi-wave longitudinal designs (e.g., 6-month lags) would lead to stronger correlations. Broaden sampling to underrepresented Romanian groups (e.g., Roma, Tatars, Saxons, Lipovans, Aromanians) and fathers in detention to test cultural/contextual mechanisms and inform tailored programs would broaden the understanding of fathers beyond current population.

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