Table 1. Results of the 25 Articles Used for the Qualitative Synthesis

Author	Type of Study	Sample Size	Gender	Age	Result
Mezulis et al,[17] 2004	Longitudinal cohort	350 Mothers, fathers, and children	48% Boys 52% Girls	Data not provided	Paternal depression during a child's infancy exacerbated the effect of maternal depression. This moderating effect was limited to depressed fathers spending medium to high amounts of time caring for their infants, which could play a role later in the child's behavior problems.
Ramchandani et al,[18] 2005	Longitudinal cohort	8,431 Fathers 11,833 Mothers 10,024 Children	Data not provided	Data not provided	Depression in fathers during the postnatal period was associated with adverse emotional and behavioral outcomes in children aged 3–5 y (aOR = 2.09; 95% CI, 1.42–3.08) and an increased risk of conduct problems in boys (aOR = 2.66; 95% CI, 1.67–4.25).
Davé et al,[19] 2008	Cross-sectional study	248 Biological father and mother dyads	Data not provided	Data not provided	Children of fathers with a major depressive syndrome were almost 9 times more likely to have consulted a health professional for speech and language problems (aOR = 8.67; 95% CI, 1.99–37.67; *P* = .004) and 7 times more likely to have consulted for externalizing behavior problems (aOR = 6.98; 95% CI, 1.00–48.76; *P* = .05).
Ramchandani et al,[20] 2008	Longitudinal prospective cohort	13,351 Mothers 12,884 Fathers 10,024 Children	Data not provided	Data not provided	Fathers who were depressed in both the prenatal and postnatal periods had children who had the highest risks of subsequent psychopathology, measured by total problems at age 3½ years (OR = 3.55; 95% CI, 2.07–6.08) and psychiatric diagnosis at age 7 y (OR = 2.54; 05% CI, 1.19–5.41). It was also observed that children whose fathers had postnatal depression had higher rates of conduct problems at age 3½ y (OR = 2.14; 95% CI, 1.22–3.72), but it did not hold true for prenatal depression.
Mäntymaa et al,[21] 2008	Cross-sectional study	350 Mothers, fathers, and children	48% Boys 52% Girls	Data not provided	Mother's high level of depressive symptoms (OR = 6.1; 95% CI, 1.2–9.8; *P* = .03) and father's perceived moderate or poor mental health (OR = 4.6; 95% CI, 1.1–19.8; P = .04) during the preceding year both independently increased the infant's risk of withdrawal.
Hadley et al,[22] 2008	Cross-sectional study	431 Children	Data not provided	3–24 mo	No relationship was found between paternal symptoms of mental disorders and child development.
Daniels et al,[23] 2008	Case-control study	1,227 Children cases 30,693 Controls	77% Boys 33% Girls	Data not provided	Parents of children with autism were more likely to have been hospitalized for a mental disorder. Among mothers, depression (OR = 1.7; 95% CI, 1.0–2.6) and neurotic and personality disorder and other nonpsychotic disorders (OR = 1.7; 95% CI, 1.3–2.2) were associated with increased risk of autism among the children, which did not hold true for fathers.
Ghanizadeh et al,[24] 2008	Cross-sectional study	81 Children 79 Mothers 72 Fathers	Data not provided	Age (y) mean ± SD (range): Children = 8.7 ± 3.07 (5–15) Mothers = 40.1 ± 7.4 (21–53) Fathers = 34.6 ± 7.1 (30–62)	The rate of major depressive disorder in mothers and fathers of children with ADHD was 48.1% and 43.0%, respectively.
Petitclerc et al,[25] 2009	Longitudinal prospective cohort	1,942	Data not provided	Data not provided	Postnatal depressive symptoms experienced by the mother (OR = 1.71; 95% CI, 1.03–2.84) and the father (OR = 2.02; 95% CI, 1.10–3.71) were independent predictors of chronic trajectory of disregard to rules.
Segenreich et al,[26] 2009	Longitudinal cohort	36 Parent cases (21 mothers, 15 fathers) 30 Controls (18 mothers, 12 fathers) 26 Children cases 31Controls	Data not provided	Children age (y) mean (range): Cases = 12 (10–13) Controls = 12 (9–14)	No relationship was observed between paternal symptoms and children with ADHD. This study observed the prevalence of anxious and depressive symptoms in mothers of children with ADHD, and these symptoms could be independent of presence of ADHD and impairments associated with ADHD.
Dietz et al,[27] 2009	Longitudinal study	101 Mother-toddler dyads	57 Boys 44 Girls	Data not provided	The presence of paternal psychopathology (67% of fathers had mood or anxiety disorder including depressive disorder) and mother's history of depression were significantly associated with toddlers' externalizing behavior problems (*B* = 11.49, SE = 4.16), t_{100} = 2.76, *P* < .01 and internalizing behavior problems (*B* = 12.54, SE = 4.03, t_{100} = 3.177, *P* < .01).
Pemberton et al,[28] 2010	Longitudinal cohort	351 Children	43% Girls	Data not provided provided	Adoptive father (AF) depressive symptoms at 9 mo of child age was a marginally significant predictor of child externalizing symptoms (β = 0.11, *P* < .10). In addition, AF antisocial behavior marginally at 9 mo (β = 0.10, *P* < .10) and significantly at 18 mo (β = 0.09, *P* < .05) predicted AF depressive symptoms.
Fletcher et al,[29] 2011	Prospective study	2,620 Two–biological-parent families	Data not provided	1st wave of data collection = 3–19 mo 2nd wave = 2–3 y 3rd wave = 4–5 y	Early paternal depression was a significant predictor of behavioral difficulties (OR = 3.34; 95% CI, 3.06–3.65) and low development and well-being score (OR = 2.70; 95% CI, 2.44–2.98).
Weitzman et al,[30] 2011	Cross-sectional study	21,993 Children	11,187 Boys 10,806 Girls	5–17 y	Paternal depressive symptoms (aOR = 1.72; 95% CI, 1.33–2.23) and mental health problems were independently associated with increased rates of child emotional or behavioral problems after controlling for confounders.
Vidair et al,[31] 2011	Cross-sectional study	801 Mothers 182 Fathers 848 Children	581 (68.5%) Boys 267 (31.5%) Girls	Age (y) mean (SD): Children = 10.43 (3.19); range, 6–17 Mothers = 38.87 (7.97) Fathers = 42.95 (8.56)	This study observed no significant association between paternal symptoms and a child's functioning.
Callender et al,[32] 2012	Prospective	245 Children with parents	127 Boys 118 Girls	Children were assessed at the age of 3 y at time T1 and at the age of 5½ y at time T2	Paternal depressive symptoms were associated with higher levels of externalizing problems after accounting for maternal depressive symptoms (β = 0.18, *P* = .01).
Hanington et al,[33] 2012	Cross-sectional study	14,541 Parents and children	Data not provided	Data not provided	A strong relationship between postnatal maternal (OR = 2.79; 95% CI, 2.30–3.40) and paternal (OR = 2.20; 95% CI, 1.47–3.28) depression predicted total child problems at age 42 months. Antenatal maternal (OR = 2.43; 95% CI, 2.03–2.91) and paternal (OR = 2.34; 95% CI, 1.70–3.23) depression each predicted later total problems in children.
Kvalevaag et al,[34] 2013	Cross-sectional study	31,663 Children 31,663 Fathers	14,662 Boys 14,041 Girls	Data not provided	Fathers's depressive symptoms were assessed by self-report (HSCL) in week 17 or 18 of gestation. [The HSCL-25 is a symptom inventory to measure symptoms of anxiety and depression in a person.] The study found a slight positive association between fathers' psychological distress and children's behavioral difficulties (B = 0.19; 95% CI, 0.15–0.23), emotional difficulties (B = 0.22; 95% CI, 0.18–0.26), and social functioning (B = 0.12; 95% CI, 0.07–0.16).
Van Batenburg-Eddes et al,[35] 2013	Prospective	2,280 at Generation R 3,442 at ALSPAC	Data not provided	Mean maternal age: 32 y at Generation R 29 y at ALSPAC	Paternal depression was associated with a higher risk of child attention problems (OR = 1.11; 95% CI, 1.00–1.24). However, after adjusting for confounding factors, there was little statistical evidence that it substantially affected the child.
Breaux et al,[36] 2014	Longitudinal cohort	199 Children and their parents	Data not provided	Age mean ± SD at initial screening at first home visit when child was ≥ 3 y old: Children = 44.54 ± 3.18 (range, 37.50–50.30) mo Mothers = 32.79 ± 6.36 Fathers = 36.45 ± 7.54	Maternal ADHD and Cluster A symptoms and paternal ADHD and depression/anxiety symptoms were predictors of child functioning.
Gutierrez-Galve et al,[37] 2015	Longitudinal cohort	13,351 Mothers 12,884 Fathers 13,796 Singletons and first-born twins	Data not provided	Data not provided	The study found a significant effect of paternal depression postnatally on total child psychological problems at 42 mo with total effect of 0.168 (95% CI, 0.133–0.202; *P* < .001) and 0.130 at 81 mo (95% CI, 0.098–0.161; *P* < .001) of age.
Breaux et al,[38] 2017	Longitudinal study	258 Children	138 Boys 120 Girls	Age mean (SD) = 44.13 (3.39) mo	Both family history of ADHD (ADHD-β = 0.15, SE = 0.06, *P* = .02; ODD-β = 0.16, SE = 0.07, *P* = .02) and paternal comorbid psychopathology (ADHD-β = 0.25, SE = 0.09, *P* = .01; ODD- β = 0.34, SE = 0.09, *P* < .001) predicted later child ADHD and ODD symptoms. The paternal psychopathology included depression, anxiety, and antisocial symptoms
Bilgiç et al,[39] 2018	Cross-sectional study	542 Treatment-naive children with ADHD and their biological parents 593 Parents	436 (80.4%) Boys 106 (19.6%) Girls	Age (y) mean ± SD (range): Children = 9.4 ± 2.8 (6–18) Mothers = 34.9 ± 5.9 (24–54) Fathers = 38.6 ± 6.3 (28–62)	Turkish version of TEMPS-A was used to assess paternal depression. It covers 5 temperament dimensions: depressive, cyclothymic, hyperthymic, irritable, and anxious temperaments. This study found that paternal cyclothymic temperament had an increased effect on parent-rated ODD (β = 0.09, *P* = .011) and teacher-rated CD (β = 0.07, *P* = .012) symptoms of ADHD children.
Flouri et al,[40] 2019	Longitudinal cohort	13,442	Data not provided	Data not provided	The 6-item Kessler Psychological Distress Scale was used to assess paternal depression, which is termed paternal psychological distress. The study found that paternal psychological distress predicted hyperactivity (Coeff = 0.019*, SE = 0.004), conduct (Coeff = 0.012*, SE = 0.003), emotional (Coeff = 0.010*, SE = 0.003), and peer problems (Coeff = 0.009**, SE = 0.003) in domains of child problem behavior that were examined, after adjusting for maternal psychological distress and confounding. Total difficulties Coeff = 0.048*, SE = 0.009.
Chen et al,[41] 2020	Cohort	708,515 Father-mother-child triads	371,498 (2.4%) Boys 337,017 (47.6%) Girls	Data not provided	Paternal and maternal depression occurring in the pre-pregnancy, perinatal, and postnatal periods was significantly associated with subsequent ADHD and ASD in the offspring, with HRs between 1.42 (95% CI, 1.35–1.49 for maternal) and 2.25 (95% CI, 2.09–2.41 for paternal). Also, the chronicity and additive effect of paternal and maternal depression were related to increased risks of offspring ADHD and ASD. The effects of maternal depression were stronger than the effects of paternal depression for offspring ADHD (HR = 1.35; 95% CI, 1.27–1.45) and ASD (HR = 1.23; 95% CI, 1.05–1.46) risks.

Abbreviations: ADHD = attention-deficit/hyperactivity disorder, aOR = adjusted odds ratio, ASD = autism spectrum disorder, CD = conduct disorder, HR = hazard ratio, HSCL = Hopkins Symptom Checklist, ODD = oppositional defiant disorder, OR = odds ratio, TEMPS-A = Temperament Evaluation of the Memphis, Pisa, Paris, and San Diego Autoquestionnaire. *P < .05. **P < .01.