**Supplementary Text1. Complete MEDLINE search strategy**

Total articles retrieved from MEDLINE search - 3579

Restrictions – None

Date search conducted: March, 2017

Search Terms:

((((parent\*[Title/Abstract] OR patern\*[Title/Abstract] OR matern\*[Title/Abstract] OR mother\*[Title/Abstract] OR father\*[Title/Abstract]))) AND (((((((mental disorder\*[Title/Abstract] OR mental illness\*[Title/Abstract] OR mental health\*[Title/Abstract] OR psychopathology\*[Title/Abstract] OR psychiatric\*[Title/Abstract] OR psychologic\*[Title/Abstract] OR development disorder\*[Title/Abstract] OR developmental disorder\*[Title/Abstract] OR autis\*[Title/Abstract] OR asperger\*[Title/Abstract] OR schizophreni\*[Title/Abstract] OR aggressi\*[Title/Abstract] OR akathisi\*[Title/Abstract] OR sleep disorder\* OR insomnia\*[Title/Abstract] OR mood disorder\*[Title/Abstract] OR affective disorder\*[Title/Abstract] OR impulsive behavior\*[Title/Abstract] OR impulsive behaviour\*[Title/Abstract] OR borderline personalit\*[Title/Abstract] OR personality disorder\*[Title/Abstract] OR affective dysregulat\*[Title/Abstract] OR impulsive behavioral dysregulation\*[Title/Abstract] OR impulsive behavioural dysregulation\*[Title/Abstract] OR behavioral dyscontrol[Title/Abstract] OR behavioural dyscontrol[Title/Abstract] OR mood lability[Title/Abstract] OR irritab\*[Title/Abstract] OR self injurious[Title/Abstract] OR self injury[Title/Abstract] OR self mutilat\*[Title/Abstract] OR self destructive[Title/Abstract] OR self harm[Title/Abstract] OR self-harm[Title/Abstract] OR suicid\*[Title/Abstract] OR parasuicid\*[Title/Abstract] OR attention deficit[Title/Abstract] OR adhd[Title/Abstract] OR hyperkinetic syndrome\*[Title/Abstract] OR disintegrative disorder\*[Title/Abstract] OR oppositional defiant disorder\*[Title/Abstract] OR psychotic\*[Title/Abstract] OR psychosis[Title/Abstract] OR psychoses[Title/Abstract] OR schizoaffective[Title/Abstract] OR schizotypal[Title/Abstract] OR bipolar disorder\*[Title/Abstract] OR manic disorder\*[Title/Abstract] OR mania\*[Title/Abstract] OR manic depression[Title/Abstract] OR depressive disorder\*[Title/Abstract] OR depressive syndrome\*[Title/Abstract] OR depressive neuroses[Title/Abstract] OR endogenous depression\*[Title/Abstract] OR neurotic depression\*[Title/Abstract] OR unipolar depression\*[Title/Abstract] OR tourette\*[Title/Abstract] OR tic disorder\*[Title/Abstract] OR stress disorder\*[Title/Abstract] OR ptsd[Title/Abstract] OR anorexia\*[Title/Abstract] OR anorexic\*[Title/Abstract] OR compulsive disorder\*[Title/Abstract] OR compulsive neuros\*[Title/Abstract] OR anankastic personalit\*[Title/Abstract] OR drug abuse\*[Title/Abstract] OR drug misuse\*[Title/Abstract] OR substance abuse\*[Title/Abstract] OR substance misuse\*[Title/Abstract] OR substance addict\*[Title/Abstract] OR drug addict\*[Title/Abstract] OR alcoholi\*[Title/Abstract] OR alcohol addict\*)) AND title/abstract)) OR (((substance-related disorders OR child of impaired parents OR mental disorders diagnosis in childhood OR mood disorders OR impulsive behavior OR personality disorders OR self-injurious behavior OR schizophrenia and disorders with psychotic features OR anxiety disorders OR anorexia nervosa) AND mesh terms))) AND ((suicid\*[Title/Abstract] OR self-harm\*[Title/Abstract] OR self harm\*[Title/Abstract] OR parasuicid\*[Title/Abstract] OR attempted suicid\*[Title/Abstract] OR self-poison[Title/Abstract] OR self injur\*[Title/Abstract] OR self-injur\*[Title/Abstract]))) OR ((suicide OR self mutilation OR self-injurious behavior[MeSH Terms]))))

**Supplementary Text2. Systematic Review Protocol**

*Date: Nov. 6th 2015*

*This protocol was externally peer reviewed*

**Title:** Exposure to parental psychopathology and offspring’s risk of suicidal ideation, suicide attempt and suicide: A systematic review

**Research Question:**

To determine the association between exposure to parental psychopathology in childhood and risk of subsequent suicidal behavior in offspring and determine how this association differs by methodological, demographic and clinical features in both parent and child.

**Objectives:**

*Primary:*To identify and synthesize all analytic studies that examined the association between exposure to parental psychopathology in childhood and subsequent suicidal behavior and describe the direction, and magnitude of unadjusted, adjusted and stratified associations.

*Secondary:* To determine if the association between parental psychopathology and suicidal behavior (severity of ideation, planned/unplanned attempts) differs by study design, the type(s) of parental psychopathology, psychopathology in the child, age of parent(s) and child, sex/gender of the parent and child, or by established measures of family functioning.

**Population:** Children and adolescents

**Exposure:** Parental psychopathology\*

**Outcome:** *Primary -* suicide attempt prior to age 25. *Secondary –* suicidal thoughts and death by suicide prior to age 25.

**Study Design:** All analytic designs excluding reviews, qualitative studies and single case studies

\*Any DSM criteria psychiatric disorder and/or suicidal ideation/attempt/death

**Methods**

This systematic review will employ principles from the PRISMA statement[1](#_ENREF_1).

**Study Inclusion Criteria:**

* Any analytic study from any Country
* Study must report on parental psychopathology exposures occurring between the ages of >0 years to 25 years in offspring. Studies with larger age categories will be included as long as the age categories can be collapsed into the >0 to 25 year age range.
* Study must report on offspring suicide attempts, suicidal thoughts, or death by suicide
* No restrictions based on year of study or language

**Study Exclusion Criteria:**

* Reviews, qualitative studies and single case studies

**Search Strategy:**

A comprehensive search strategy made up of search terms reflecting the exposure and outcomes will be conducted in collaboration with a librarian using a combination of title, abstract and major subject heading terms (meSH) such as “parents” and “mental illness” or “psychopathology” and “suicide” or “self-injurious behavior” or “self-harm”. Search syntax code will be used to accommodate plurals and truncation, and several variations of international spelling and hyphenations were used.

Databases to be searched: MEDLINE, CINAHL, EMBASE, psycINFO, Web of Science

Grey literature:

- Canadian National clearinghouse on Family violence (<http://www.phac-aspc.gc.ca/ncfv-cnivf/index-eng.php>)

- The California Evidence-based clearinghouse for Child Welfare (http://www.cebc4cw.org/)

- The Canadian Child Welfare Research Portal (<http://cwrp.ca/>)

- The US National repository for evidence-based programs and practices (<http://www.nrepp.samhsa.gov/>)

- Child Welfare Information Gateway (<https://www.childwelfare.gov/>)

Fugitive literature: Dissertations and Theses Online

**Data Collection:** Studies will be screened and data will be abstracted from two independent abstractors. Both abstractors will review their identified studies with each other, and any discrepancies will be discussed and resolved with a third independent abstractor. Data from all studies meeting eligibility criteria will be systematically abstracted into a standardized and pilot tested data abstraction form. Abstractors will be instructed to follow specific abstraction guidelines. Inter-rater reliability between abstractors will be assessed and discrepancies will be resolved with a third independent abstractor. Any instances of missing data will be handled by contacting the study authors. Studies where some data are not available will not be omitted, but rather noted in the results and discussion section of the systematic review and interpreted accordingly.

**Data Management:** All abstracts identified from the search strategy from all databases will be exported into Endnote. Number of duplicates will be recorded and double checked before omitting from the initial list of abstracts. Titles and abstracts will be screened to determine if a study potentially meets inclusion criteria. Studies will be grouped as follows: (1) not relevant as indicated by the title/abstract, (2) potentially relevant but not English, (3) potentially relevant. The full text of all studies identified as potentially relevant will be reviewed and reasons for exclusion documented.

**Risk of Bias:** Risk of bias will be systematically assessed by both screeners using criteria from the Cochrane Risk of Bias Assessment Tool: for Non-Randomized Studies of Interventions (ACROBAT-NRSI[2](#_ENREF_2)). Studies will not be excluded based on a ROB rating, but will be discussed in the context of the specific bias.

**Analysis:** It is expected that the studies to be included in this review will be too heterogeneous to calculate a pooled estimate. A systematic synthesis of the findings will be conducted.

**References**

1. Moher D, Liberati A, Tetzlaff J, Altman DG, Group P. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Bmj.* 2009;339:b2535.

2. Sterne JAC, Higgins PT, C. RB. *on behalf of the development group for ACROBAT-NRSI. A cochrane risk of bias assessment tool: for non-randomized studies of interventions (ACROBAT-NRSI), version 1.0. 0, 24.* 2014.

Supplementary Figure 1. Adjusted associations between parental psychopathology and offspring suicide-related thoughts, suicide attempts and sucide

Alcohol: alcohol use disorders; GAD: generalized anxiety disorder; Panic: panic disorder; Personality: personality disorder; Psych: any psychopathology; SA: suicide attempt; SRT: suicide-related thoughts; SUD: substance use disorders; Mood: mood disorders

a Hazard ratio

Supplementary Figure 2. Adjusted associations between maternal psychopathology and offspring suicide-related thoughts, suicide attempts and suicide

Alcohol: alcohol use disorders; Non-mood psych: any non-mood disorder; Psych: any psychopathology; SA: suicide attempt; SRT: suicide-related thoughts; SUD: substance use disorders; Mood: mood disorders

a Hazard ratio

Supplementary Figure 3. Adjusted associations between paternal psychopathology and offspring suicide-related thoughts, suicide attempts and suicide

Alcohol: alcohol use disorders; Non-mood psych: any non-mood disorder; Psych: any psychopathology; SA: suicide attempt; SRT: suicide-related thoughts; SUD: substance use disorders; Mood: mood disorders

a Hazard ratio

Supplementary Figure 4. Adjusted associations between parental psychopathology and offspring suicide-related behavior from studies using ICD codes

Psych: any psychopathology; SRB: suicide-related behaviors; SUD: substance use disorders; Mood: mood disorders

a Hazard ratio

Supplementary Table 1. Characteristics of included studies

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Authors | Study design | Country | Sample size | Age  (years) | Sex  (% female) | Exposure | Exposure comparison | Exposure measure | Outcome | Outcome measure |
| Agerbo et al., (2002) | Case-control | Denmark | 25296 (496 cases) | 10-21 | 22% (cases) | Parent suicide/psych admission | Alive parents/No psych admission | ICD codes | Suicide | ICD codes |
| An et al., (2010) | Cross-sect. | Korea | 2965 | 15-18 | 49% | Parent SRT | No SRT | Parent report: National survey | SRT | Self-report: National survey |
| Arendt et al., (2007) | Cross-sect. | Denmark | 119 | Mean=22.3, SD=3.2 | 17% | Parental AUD | No parental AUD | SCAN | SRT/SA | Demographic questionnaire |
| Atwoli et al., (2014) | Cross-sect. | Africa | 4315 | 18-60: outcomes recalled (13-19) | 59% | Parent psych/SA/suicide | No parent psych/SA/  suicide | FH-RDC | SRT/SA | CIDI |
| Beautrais et al., (1996) | Case-control | New Zealand | 129 cases, 153 control | 13-24 | 54% | Parent alcohol | No alcohol | Offspring report: Semi-structured interview | SA | Self-report/  medical record |
| Brent et al., (2015) | Cohort | USA | 701 | Exposed (mean=18, SD=9) | 48% | Parent SA (with mood dx) | No parent SA (with mood dx) | Clinical interview | SRT/SA | Columbia SHF |
| Brent et al., (2002) | Cross-sect. | USA | 299 | 2+ (mean=20, SD=12) | Children of parents with SA: 25% | Parent SA (with mood dx) | No parent SA (with mood dx) | SCID | SA | KSADS, Columbia SHF, BSIS |
| Brent et al., (1994) | Case-control | USA | 67 cases, 67 controls | 19+ cases  (mean=17, SD=2) | 15% (cases) | Parent SA | No parent SA | FH-RDC | Suicide | Medical record |
| Burke et al., (2010) | Cross-sect. | USA | 449 | 10+ (mean=19, SD=8) | 48% | Parent SA (with mood dx) | No parent SA (with mood dx) | Parent report: Columbia SHF | SA | SCID/K-SADS |
| Cheng et al., (2014) | Case-control | Taiwan | 2000 (500 cases) | 15-19 | 39% (cases) | Parent suicide | Alive parents | COD registry | Suicide | COD registry |
| Chitsabesan et al., (2003) | Cohort | UK | 149 | 11-16 | 89% | Parent psych | No parent psych | General Health Questionnaire | SA | Offspring report: SSI/Parent report: deliberate self-harm interview |
| Christiansen et al., (2011) | Case-control | Denmark | 403341 | 13-27 | stratified | Parent SRB/psych | No admission for SRB/psych | ICD codes | SRB | ICD codes |
| Christoffersen et al., (2003) | Cohort | Denmark | 84765 | 13-27 | NR | Parent alcohol | No admission for alcohol | ICD codes | SRB | ICD codes |
| Chronis-Tuscano et al., 2010 | Cohort | USA | 248 | 6-14 | 16% | Maternal MDD | No maternal MDD | SCID | SA | DISC-IV |
| Conner et al., (2014) | Cohort | USA | 684 | 7-14 | NR | Parent psych | No parent psych | SSAGA | SRT/SA | SSAGA |
| Fergusson et al., (2000) | Cohort | New Zealand | 965 | 15-21 | 50% | Parent alcohol  /SUD | No parent alcohol/SUD | Parent report | SRT/SA | Offspring/  parent report/  medical record |
| Friedman et al., (1984) | Case-control | USA | 34 | 13-19 | 75% (with SA) | Parent psych/mood | No parent psych/mood | FH-RDC | SA | SADS |
| Garber et al., (1998) | Cohort | USA | 240 | mean=12, SD=0.6 | 54% | Maternal MDD/SA | No maternal MDD/SA | SCID/BDI | SRT/SA | CDI/CBCL/  CDRS |
| Geulayov et al., (2012) | Cohort | UK | 6580 | 16-17 | 58% | Parent SA | No parent SA | Self-report life events questionnaire | SRT/SA | child self-report questionnairea |
| Glowinski et al., (2001) | Cross-sect. | USA | 1252 | 12-26 | 52% | Parent mood/alcohol | No parent mood/alcohol | CAPI | SRT/SA | SSAGA |
| Hammerton et al., (2015a/b, 2016) | Cohort | UK | 10,559 | 16 | NR | Chronic, severe maternal MDD | Low levels of depression symptoms | Edinburgh Postnatal Depression Scale | SRT/SA | Non-validated self-report  questionnaire |
| Herba et al., (2008) | Cohort | Nether-lands | 926 | mean=11,  SD=0.5 | 58% | Parent intern/extern disorders | No parent intern/extern  disorders | TRIALS family history interview | SRT | Youth Self Report |
| Isohookana et al., (2013) | Cross-sect. | Finland | 508 | 12-17 | 59% | Parent psych/SUD | No parent  psych/SUD | Offspring reported: EuropASI | SRT/SA | KSADS |
| Jakobsen et al., (2011) | Case-control | Denmark | 3465 cases | 10-23 | NR | Parent suicide | Alive parents | National mortality registry | SRB | ICD codes |
| Kerr et al., (2008) | Cohort | USA | 205 | 12-29 | 0% (sample of boys) | Parent depressive symptoms/SUD | No parent depressive symptoms/SUD | CES-D/Michigan Alcoholism Screening Test | SRT | BDI |
| Khasakhala et al., (2013) | Cross-sect. | Africa | 250 | 13-25 | 40% | Parent MDD/Paternal AUD | No parent MDD/paternal AUD | MINI-Plus | SRB (not defined) | MINI-Kid |
| King et al., (2010) | Cohort | USA | 352 | 13-17 | 72% | Parent psych | No parent psych | Family History Screen | SA | DISC-IV |
| Klapper (1990) | Cross-sect. | USA | 40 | 6-12 | 70% (Exposed) | Parent SRT/SA | No parent SRT/SA | SBQ/suicide probability scale, MCMI-R | SRT | SSB, CDRS-R |
| Klimes-Dougan et al., (2008) | Cohort | USA | 139 | 6-25 | 58% | Maternal mood | No maternal mood | SADS | SRT/SA | SCID/Child assessment schedule/DICA |
| klimes-Dougan et al., (1998) | Cohort | USA | 192 | 6-18 | 58% | Maternal mood | No maternal mood | SADS | SRT/SA | SCID/Child assessment schedule/DICA |
| Krajewska et al., (2014) | Cross-sect. | Poland | 119 | mean=15, SD=1 | 47% | Parent alcohol /suicide/SRB | No parent alcohol/suicide/  SRB | ICD codes | SRB | ICD codes |
| Kuramoto et al., (2010) | Cohort | Sweden | 38440 | <18 | 49% | Parent suicide | Death from accidents | ICD codes | SRB | ICD codes |
| Ledgerwood et al., (2004) | Cross-sect. | Canada | 153 | 14-20 | 64% | Parent psych/  alcohol/SUD | No parent psych/alcohol/  SUD | Non-validated self-report measure | SRT/SA | Non-validated self-report measure |
| Lewinsohn et al., (2005) | Cohort | USA | 711 | 14-18 | 60% | Parent MDD/non-mood disorders | No parent psych | SCID | SA | KSADS |
| Lieb et al., (2005) | Cohort | Germany | 933 | 14-24 | 50% | Maternal SRT/SA | No maternal SRT/SA | Munich-CIDI | SRT/SA | Munich-CIDI |
| Ljung et al., (2013) | Case-control | Sweden | 235,395 | 12-30 | 40% | Parent Schizophrenia | No Schizophrenia | ICD codes | SRB/  suicide | ICD codes |
| Martin et al., (2016) | Cross-sect. | USA | 360 | 3-8 | 28% | Maternal psych/SRB | No maternal psych/SRB | Family History Screen | SRT/SRB | Diagnostic Infant and Preschool Assessment |
| Melhem et al., (2007) | Cohort | USA | 365 | mean=20,  SD=9 | 48% | Parent SA (with mood dx) | No parent SA (with mood dx) | SCID | SA | SADS/SCID/Columbia SHF/SSI |
| Mercy et al., (2001) | Case-control | USA | 666 (153 cases) | 13-34 (≈50% 13-24) | 46% (cases) | Parent SRT/SA | No parent SRT/SSA | Offspring self-report | SA | Medical record |
| Min et al., (2012) | Cross-sect. | South Korea | 707 | mean=6,  SD=3 | 50% | Maternal MDD/SRT | No maternal MDD/SRT | BDI | SRT | Maternal report: BASC-2 |
| Mittendorfer-Rutz et al., (2008) | Case-control | Sweden | 158840 (14440 cases) | 10+ (mean=19, SD=NR) | 67% (cases) | Parent psych/SRB | No parent psych/SRB | ICD codes | SRB | ICD codes |
| Mortier et al., (2017) | Cohort | Belgium | 2042 | mean=18, SD=NR | NR | Parent psych | No parent psych | CIDI | SRT/SRB | Self-injurious Thoughts and Behaviors Int. |
| Niederkrotenthaler et al., (2012) | Case-control | Sweden | 18566 cases (matched up to 10 controls) | mean (SA onset)=21, SD=4 | 62% (cases) | Parent SRB/suicide | No SRB/suicide | ICD codes | Suicide | ICD codes |
| Pfeffer et al., (1994) | Cohort | USA | 123 | mean ≈ 10, SD=NR | 25% | Parent SRT/SA | No parent SRT/SA | SADS, FH-RDC | SRT/SA | SSB |
| Pfeffer et al., (1998) | Cohort | USA | 133 | 6-12 | 30% | Maternal SRT | No maternal SRT | Clinician interview | SRT/SA | SSB, spectrum of assaultive behavior scale, child concept of death scale |
| Peyre et al., (2017) | Cross-sect. | USA | 34,653 | 18+:  outcomes recalled (<13), (13-17) | NR | Parent alcohol, SUD, MDD, personality | No parent psych | Associated Disabilities Interview Schedule (DSM-IV) | SA | National self-report survey questions |
| Reyes et al., (2011) | Cohort | Puerto Rico | 691 | 12-15 | 51% | Parent alcohol/SUD/MDD | No parent alcohol/SUD/  MDD | CIDI (Spanish), saliva samples | SA | CIDI (Spanish) |
| Rossow et al., (2012) | Cross-sect. | Norway | 11,678 | 13-19 | 2002 survey: 51% | Parent alcohol | No parent alcohol | Parent report: National survey | SRT/SA | SCL-90 |
| Rueter et al., (2005) | Cohort | USA | 345 | 12-17 | 50% | Parent SRT/SA | No parent SRT/SA | YRBS | SRT | SCL-R-90 |
| Santana et al., (2015) | Cross-sect. | Brazil | 2942 | Adults: outcomes recalled (3-12), (13-19) | NR | Parent psych | No parent psych | ICD codes | SRT/SA | FH-RDC |
| Spindler (1990) | Cross-sect. | USA | 154 | 14+ | 64% | Parent MDD | No parent MDD | Demographic measure | SRT/SA | BDI |
| Tsypes et al., (2015) | Cohort | USA | 203 | 8-14 | 50% | Maternal MDD | No maternal MDD | SCID | SRT | KSADS |
| Weissman et al., (1986) | Cross-sect. | USA | 220 | 6-23 | 52% | Parent MDD | No parent MDD | SADS | SA | KSADS |
| Weller et al., (2001) | Cross-sect. | USA | 116 | 5-13 | 50% | Parent psych/SRB | No parent psych/SRB | DICA; medical record | SA | DICA; medical record |

Alcohol: Alcohol use/dependence; BASC-2: Behavior Assessment for Children – second edition; BSIS: Beck Suicide Intent Scale; BDI: Beck Depression Inventory; BD: Bipolar disorder; CAPI; Computer assisted phone interview; CBCL: Childs Behavior Checklist; CDI: Childs Depression Inventory; CDRS: Childs Depression Rating Scale; CES-D: Centre for Epidemiologic Studies Depression; CIDI: Composite International Diagnostic Interview; COD: Cause of death; Columbia SHF: Columbia Suicide History Form; Cross-sect: Cross-sectional; DICA: Diagnostic Interview for Child and Adolescents; DISC: Diagnostic Interview Schedule for Children; DSM: diagnostic and statistical manual of mental disorders; EuropeASI: European adaptation of a multidimensional assessment instrument for drug and alcohol dependence; FH-RDC: Family History Research Diagnostic Criteria; NR: not reported; MCMI-R: Millon Clinical Multiaxial Inventory-revised; MDD: Major depressive disorder; SA: Suicide attempt; SADS: Schedule for Affective Disorders; KSADS: Kiddie SADS; SBQ; Suicide Behaviors Questionnaire; SCAN: Schedules of Clinical Assessment in Neuropsychiatry; SCL: Symptom checklist; SRT: Suicide-related thoughts; SRB: suicide-related behavior; SSAGA: Semi Structured Assessment for the Genetics of Alcoholism; SCID; Structured Clinical Interview for DSM Disorders; SSB: Spectrum of suicidal behavior; SSI: Scale for Suicide Ideation; SUD: Substance use disorder

aKidger et al., 2012

Supplementary Table 2. Risk of bias of eligible studies

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Authors** | **LOW** | **MODERATE** | **SERIOUS** | **CRITICAL** |
| Agerbo et al., (2002) |  | X |  |  |
| An et al., (2010) |  |  | X |  |
| Arendt et al., (2007) |  |  |  | X |
| Atwoli et al., (2014) |  |  |  | X |
| Beautrais et al., (1996) |  |  | X |  |
| Brent et al., (2015) |  |  | X |  |
| Brent et al., (2002) |  |  | X |  |
| Brent et al., (1994) |  |  | X |  |
| Burke et al., (2010) |  |  | X |  |
| Cheng et al., (2014) |  | X |  |  |
| Chitsabesan et al., (2003) |  |  | X |  |
| Christiansen et al., (2011) |  |  | X |  |
| Christoffersen et al., (2003) |  |  | X |  |
| Chronis-Tuscano et al., (2010) |  |  | X |  |
| Conner et al., (2014) |  |  | X |  |
| Fergusson et al., (2000) |  | X |  |  |
| Friedman et al., (1984) |  |  | X |  |
| Garber et al., (1998) |  |  | X |  |
| Geulayov et al., (2012) |  | X |  |  |
| Glowinski et al., (2001) |  |  | X |  |
| Hammerton et al., (2015a/b, 2016) |  | X |  |  |
| Herba et al., (2008) |  |  | X |  |
| Isohookana et al., (2013) |  |  |  | X |
| Jakobsen et al., (2011) |  |  | X |  |
| Kerr et al., (2008) |  |  | X |  |
| Khasakhala et al., (2013) |  |  | X |  |
| King et al., (2010) |  |  | X |  |
| Klapper (1990) |  |  |  | X |
| Klimes-Dougan et al., (2008) |  |  | X |  |
| klimes-Dougan et al., (1998) |  | X |  |  |
| Krajewska et al., (2014) |  |  | X |  |
| Kuramoto et al., (2010) |  |  | X |  |
| Ledgerwood et al., 2004 |  |  |  | X |
| Lewinsohn et al., (2005) |  | X |  |  |
| Lieb et al., (2005) |  | X |  |  |
| Ljung et al., (2013) |  | X |  |  |
| Martin et al., (2016) |  |  | X |  |
| Melhem et al., (2007) |  |  | X |  |
| Mercy et al., (2001) |  |  | X |  |
| Min et al., (2012) |  |  | X |  |
| Mittendorfer-Rutz et al., (2008) |  |  | X |  |
| Mortier et al., (2017) |  |  | X |  |
| Niederkrotenthaler et al., (2012) |  | X |  |  |
| Peyre et al., (2017) |  |  | X |  |
| Pfeffer et al., (1994) |  |  | X |  |
| Pfeffer et al., (1998) |  |  | X |  |
| Reyes et al., (2011) |  | X |  |  |
| Rossow et al., (2012) |  |  | X |  |
| Rueter et al., (2005) |  |  | X |  |
| Santana et al., (2015) |  |  | X |  |
| Spindler (1990) |  |  |  | X |
| Tsypes et al., (2015) |  |  | X |  |
| Weissman et al., (1986) |  |  | X |  |
| Weller et al., 2001 |  |  |  | X |

Supplementary Table 3. Proportion of studies reporting adjusted significant and positive associations between parental psychopathology and offspring suicide-related thoughts and behavior

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Parental exposure | Offspring outcome | Total number of studies examining association | Proportion of studies reporting adjusted significant and positive associations  n(%) | | |
| Moderate ROB studies | Serious/critical ROB studies | All studies |
| SRT | SRT | 3 | 1(33.3) | 2(66.7) | 3(100.0) |
| SA | 2 | 0(0.0) | 0(0.0) | 0(0.0) |
| SRB | 0 | --- | --- | --- |
| Suicide | 0 | --- | --- | --- |
| SA | SRT | 2 | 2(100.0) | 0(0.0) | 2(100.0) |
| SA | 5 | 2(40.0) | 3(60.0) | 5(100.0) |
| SRB | 0 | --- | --- | --- |
| Suicide | 0 | --- | --- | --- |
| SRB | SRT | 0 | --- | --- | --- |
| SA | 0 | --- | --- | --- |
| SRB | 3 | 0(0.0) | 3(100.0) | 3(100.0) |
| Suicide | 0 | --- | --- | --- |
| Suicide | SRT | 0 | --- | --- | --- |
| SA | 0 | --- | --- | --- |
| SRB | 4 | 0(0.0) | 4(100.0) | 4(100.0) |
| Suicide | 3 | 3(100.0) | 0(0.0 | 3(100.0) |
| Mood | SRT | 3 | 1(33.3) | 2(66.7) | 3(100.0) |
| SA | 7 | 2(25.0) | 3(42.8) | 5(71.4) |
| SRB | 2 | 0(0.0) | 2(100.0) | 2(100.0) |
| Suicide | 0 | --- | --- | --- |
| SUD/  Alcohol | SRT | 4 | 0(0.0) | 2(50.0) | 2(50.0) |
| SA | 7 | 1(16.7) | 3(42.8) | 4(57.1) |
| SRB | 2 | 0(0.0) | 2(100.0) | 2(100.0) |
| Suicide | 0 | --- | --- | --- |
| Psych | SRT | 1 | 0(0.0) | 0(0.0) | 0(0.0) |
| SA | 4 | 0(0.0) | 2(50.0) | 2(50.0) |
| SRB | 1 | 0(0.0) | 0(0.0 | 0(0.0) |
| Suicide | 1 | 1(100.0) | 0(0.0) | 1(100.0) |
| Othera | SRT | 1 | 0(0.0) | 1(100.0) | 1(100.0) |
| SA | 1 | 0(0.0) | 1(100.0) | 1(100.0) |
| SRB | 1 | 0(0.0) | 1(100.0) | 1(100.0) |
| Suicide | 1 | 1(100.0) | 0(0.0) | 1(100.0) |

Alcohol: alcohol use disorder; Mood: any mood disorder; Psych: any psychiatric disorder; ROB: risk of bias;

SA: suicide attempt; SRB: suicide-related behavior; SRT: suicide-related thoughts; SUD: substance use disorder

aOther includes: Personality disorders, anxiety disorders and schizophrenia