

Supplementary File: Search strategy for search #1 on 26th September 2019

PubMed:

Smoking	Mental Illness	Study type	Number of results
“tobacco smoking”[mh] OR “smoking”[mh] OR tobacco[tiab] OR cigarette*[tiab] OR smoking[tiab] OR smoker*[tiab]	(“Anxiety Disorders”[mh] OR “Bipolar and Related Disorders”[mh] OR “Disruptive, Impulse Control, and Conduct Disorders”[mh] OR “Dissociative Disorders”[mh] OR “Feeding and Eating Disorders”[mh] OR “Mood Disorders”[mh] OR “Personality Disorders”[mh] OR “Schizophrenia Spectrum and Other Psychotic Disorders”[mh] OR “Substance-Related Disorders”[mh] OR “Trauma and Stressor Related Disorders”[mh]) OR (disorder[Title/Abstract] OR mental[Title/Abstract] OR schizophre*[Title/Abstract] OR catatoni*[Title/Abstract] OR bipolar[Title/Abstract] OR psychosis[Title/Abstract] OR psychotic[Title/Abstract] OR depress*[Title/Abstract] OR Cyclothymi* [Title/Abstract] OR Dysphori*[Title/Abstract] OR “selective mutism”[Title/Abstract] OR Trichotillomania[Title/Abstract] OR dereali*[Title/Abstract] OR mood[Title/Abstract] OR anxi*[Title/Abstract] OR phobia[Title/Abstract] OR dysthymia[Title/Abstract] OR manic[Title/Abstract] OR mania[Title/Abstract] OR dissociat*[Title/Abstract] OR depersonali*[Title/Abstract] OR pica[Title/Abstract] OR anorexia[Title/Abstract] OR bulimia[Title/Abstract] OR binge eating[Title/Abstract] OR substance[Title/Abstract] OR posttraumatic[Title/Abstract] OR post-traumatic[Title/Abstract])	“longitudinal”[tiab] OR “follow up”[tiab] OR “follow-up”[tiab] OR “cohort”[tiab]	9089

Embase:

Smoking	Mental Illness	Study type	filters	Number of results
“tobacco use”/exp OR tobacco:ti,ab OR cigarette*:ti,ab OR smoking:ti,ab OR smoker*:ti,ab	(“anxiety disorder”/exp OR “mood disorder”/exp OR “behaviour disorder”/exp OR “dissociative disorder”/exp OR “personality disorder”/exp OR “Psychosis”/exp OR “drug dependence”/exp OR Adjustment disorder/de OR Neurosis/exp (includes dysthymia) OR Psychotrauma/de) OR (disorder:ti,ab OR mental:ti,ab OR schizophre*:ti,ab OR catatoni*:ti,ab OR bipolar:ti,ab OR psychosis:ti,ab OR psychotic:ti,ab OR depress*:ti,ab OR Cyclothymi* :ti,ab OR Dysphori*:ti,ab OR “selective mutism”:ti,ab OR Trichotillomania:ti,ab OR dereali*:ti,ab OR mood:ti,ab OR anxi*:ti,ab OR phobia:ti,ab OR dysthymia:ti,ab OR manic:ti,ab OR mania:ti,ab OR dissociat*:ti,ab OR depersonali*:ti,ab OR pica:ti,ab OR anorexia:ti,ab OR bulimia:ti,ab OR binge eating:ti,ab OR substance:ti,ab OR posttraumatic:ti,ab OR post-traumatic:ti,ab)	“longitudinal”:ti,ab OR “follow up”:ti,ab OR “cohort”:ti,ab	AND [english]/lim AND [embase]/lim	2306

Pubmed mesh term	Emtree term
anxiety disorders	“anxiety disorder”/exp
Bipolar and Related Disorders	“mood disorder”/exp
Disruptive, Impulse Control, and Conduct Disorders	“behaviour disorder”/exp
Dissociative Disorders	“dissociative disorder”/exp
Feeding and Eating Disorders	“behaviour disorder”/exp
Mood Disorders	“mood disorder”/exp
Personality Disorders	“personality disorder”/exp
Schizophrenia Spectrum and Other Psychotic Disorders	“Psychosis”/exp
Substance-Related Disorders	“drug dependence”/exp
Trauma and Stressor Related Disorders	“anxiety disorder”/exp
	Adjustment disorder/de Neurosis/exp (includes dysthymia) Psychotrauma/de

PsycINFO:

Smoking	Mental Illness	Study type	filters	Number of citations
(exp tobacco smoking"OR tobacco.ti,ab OR cigarette\$.ti,ab OR smoking.ti,ab OR smoker\$.ti,ab)	(exp Anxiety Disorders OR exp Bipolar Disorder OR exp Disruptive Behavior Disorders OR exp Attention Deficit Disorder OR exp Dissociative Disorders OR exp Eating Disorders OR exp Affective Disorders OR exp Personality Disorders OR exp Psychosis OR exp Substance Related and Addictive Disorders OR exp Stress and Trauma Related Disorders) OR (disorder.ti,ab OR mental.ti,ab OR schizophreni\$.ti,ab OR catatoni\$.ti,ab OR bipolar.ti,ab OR psychosis.ti,ab OR psychotic.ti,ab OR depress\$.ti,ab OR Cyclothymi\$.ti,ab OR Dysphori\$.ti,ab OR selective mutism.ti,ab OR Trichotillomania.ti,ab OR dereali\$.ti,ab OR mood.ti,ab OR anxi\$.ti,ab OR phobia.ti,ab OR dysthymia.ti,ab OR manic.ti,ab OR mania.ti,ab OR dissociat\$.ti,ab OR depersonali\$.ti,ab OR pica.ti,ab OR anorexia.ti,ab OR bulimia.ti,ab OR binge eating.ti,ab OR substance.ti,ab OR posttraumatic.ti,ab OR post-traumatic.ti,ab)	(longitudinal.ti,ab OR Follow up.ti,ab OR cohort.ti,ab)	english	3648

Thesaurus terms:

Pubmed mesh term	Psyc Info thesaurus term
anxiety disorders	exp Anxiety Disorders
Bipolar and Related Disorders	exp Bipolar Disorder
Disruptive, Impulse Control, and Conduct Disorders	exp Disruptive Behavior Disorders, exp Attention Deficit Disorder
Dissociative Disorders	exp Dissociative Disorders
Feeding and Eating Disorders	exp Eating Disorders
Mood Disorders	exp Affective Disorders
Personality Disorders	exp Personality Disorders
Schizophrenia Spectrum and Other Psychotic Disorders	exp Psychosis
Substance-Related Disorders	exp Substance Related and Addictive Disorders
Trauma and Stressor Related Disorders	exp Stress and Trauma Related Disorders

Scopus:

Smoking	Mental Illness	Study type	Number of results
tobacco OR cigarette* OR smoking OR smoker* Select 'article title, abstract, keywords	disorder OR mental OR schizophreni* OR catatoni* OR bipolar OR psychosis OR psychotic OR depress* OR Cyclothymi* OR Dysphori* OR { mutism } OR Trichotillomania OR dereali* OR mood OR anxi* OR phobia OR dysthymia OR manic OR mania OR dissociat* OR depersonali* OR pica OR anorexia OR bulimia OR binge eating OR substance OR posttraumatic OR post-traumatic Select 'article title, abstract, keywords	longitudinal OR "follow up" OR cohort Select 'article title, abstract, keywords	17,532

CINAHL:

Smoking	Mental Illness	Study type	Number of results
MH tobacco smoking+ OR TI tobacco OR AB tobacco OR TI cigarette* OR AB cigarette* OR TI smoking OR AB smoking OR TI smoker* OR AB smoker* OR MH smoking+	MH Anxiety Disorders+ OR MH Bipolar Disorder+ OR MH Impulse control disorders+ OR MH Social behaviour disorders+ OR MH Mental Disorders Diagnosed in Childhood+ OR MH Dissociative Disorders+ OR MH Eating Disorders+ OR MH Affective Disorders+ OR MH Personality Disorders+ OR MH Psychotic Disorders+ OR MH Substance Use Disorders+ OR MH Stress Disorders, Post-Traumatic+ OR TI disorder OR AB disorder OR TI mental OR AB mental OR TI schizophre* OR AB schizophre* OR TI catatoni* OR AB catatoni* OR TI bipolar OR AB bipolar OR TI psychosis OR AB psychosis OR TI psychotic OR AB psychotic OR TI depress* OR AB depress* OR TI Cyclothymi* OR AB Cyclothymi* OR TI Dysphori* OR AB Dysphori* OR TI selective mutism OR AB selective mutism OR TI Trichotillomania OR AB Trichotillomania OR TI dereali* OR AB dereali* OR TI mood OR AB mood OR TI anxi* OR AB anxi* OR TI phobia OR AB phobia OR TI dysthymia OR AB dysthymia OR TI manic OR AB manic OR TI mania OR AB mania OR TI dissociat* OR AB dissociat* OR TI depersonali* OR AB depersonali* OR TI pica OR AB pica OR TI anorexia OR AB anorexia OR TI bulimia OR AB bulimia OR TI binge eating OR AB binge eating OR TI substance OR AB substance OR TI posttraumatic OR AB posttraumatic OR TI post-traumatic OR AB post-traumatic	TI longitudinal OR AB longitudinal OR TI follow up OR AB follow up OR TI follow-up OR AB follow-up OR TI cohort OR AB cohort	11,037

Pubmed mesh term	Cinahl subject heading
anxiety disorders	Anxiety Disorders+
Bipolar and Related Disorders	Bipolar Disorder+
Disruptive, Impulse Control, and Conduct Disorders	Impulse control disorders+ Social behaviour disorders+ Mental Disorders Diagnosed in Childhood+
Dissociative Disorders	Dissociative Disorders+
Feeding and Eating Disorders	Eating Disorders+
Mood Disorders	Affective Disorders+
Personality Disorders	Personality Disorders+
Schizophrenia Spectrum and Other Psychotic Disorders	Psychotic Disorders+
Substance-Related Disorders	Substance Use Disorders+
Trauma and Stressor Related Disorders	Stress Disorders, Post-Traumatic+

Overview of results for search #2 on 11th May 2021

Database	Result	Date
Pubmed	1607	11/05/2021
CINAHL	1555	11/05/2021
Embase	Not available to Flinders Library but 100% of Embase content is available within Scopus and therefore included in this search	
SCOPUS	758	11/05/2021
Psycinfo	483	11/05/2021
TOTAL	4403	
Deduplicate TOTAL	3132	

Table S2 – Quality appraisal scores for cohort studies (n = 49)

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Score %
Ajdacic-Gross et al. (2009)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	U	Y	63.6
Ames et al. (2018)	U	Y	Y	Y	Y	N	Y	Y	Y	U	Y	72.7
Berk et al. (2010)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Bierhoff et al. (2019)	N/A	N/A	Y	N	N	N	Y	Y	N	N	Y	36.4
Borges et al. (2018)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Buchy et al. (2014)	Y	Y	Y	U	U	Y	Y	Y	U	U	Y	63.6
Buchy et al. (2015)	N	Y	Y	Y	U	N	Y	Y	N	U	Y	54.5
Bulhões et al. (2020)	N/A	N/A	Y	Y	Y	N	Y	Y	N	U	Y	54.5
Chen et al. (2017)	N/A	N/A	Y	N	N	N	Y	Y	Y	U	Y	45.5
Crane et al. (2021)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Davies et al. (2018)	Y	Y	Y	Y	Y	N	Y	Y	N	U	Y	72.7
Ferdinand et al. (2004)	N/A	N/A	Y	Y	Y	N	Y	Y	N	U	Y	54.5
Fonseca et al. (2021)	N/A	N/A	Y	Y	N	Y	Y	Y	N	N	Y	54.5
Gage et al. (2014)	N	Y	Y	Y	Y	N	Y	Y	N	Y	Y	72.7
Gårdvik et al. (2020)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Goodwin et al. (2004)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Goodwin et al. (2013)	N/A	N/A	Y	Y	Y	N	Y	Y	N	N	Y	54.5
Griesler et al. (2008)	U	Y	Y	Y	Y	N	Y	Y	Y	N	Y	72.7
Griesler et al. (2011)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Hu et al. (2012)	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	81.8
Hui et al. (2013)	N/A	N/A	Y	U	N	Y	Y	Y	Y	Y	Y	63.6

Isensee et al. (2003)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Johnson et al. (2000)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Jones et al. (2018)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	U	Y	63.6
Kalan et al. (2020)	N/A	N/A	Y	Y	Y	N	Y	Y	N	N	Y	54.5
Kendler et al. (2015)	N/A	N/A	Y	Y	Y	N	U	Y	N	U	Y	45.5
King et al. (2004)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
MacKie et al. (2011)	Y	Y	Y	U	U	N	Y	Y	N	U	Y	54.5
Marmorstein et al. (2010)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	N	Y	63.6
Marsden et al. (2019)	N/A	N/A	Y	Y	Y	N	Y	Y	N	U	Y	54.5
Moylan et al. (2013)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Mustonen et al. (2018)	N	Y	Y	Y	Y	N	U	Y	Y	Y	Y	72.7
Okeke et al. (2013)	N/A	N/A	Y	Y	Y	N	Y	Y	N	U	Y	54.5
Pedersen et al. (2009)	N/A	N/A	Y	Y	Y	N	Y	Y	N	U	Y	54.5
Purborini et al. (2021)	N/A	N/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	81.8
Raffetti et al. (2019)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Ranjit et al. (2019)	N/A	N/A	Y	Y	Y	N	Y	Y	Y	Y	Y	72.7
Ranjit et al. (2019b*)	N/A	N/A	Y	Y	Y	N	Y	Y	N	U	Y	54.5
Savageet al. (2016)	N/A	N/A	Y	U	N	N	Y	Y	Y	U	Y	45.5
Shete et al. (2017)	N	Y	U	U	N	N	Y	Y	N	U	Y	36.4
Smith et al. (2014)	U	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	81.8
Swendsen et al. (2010)	N/A	N/A	Y	Y	Y	U	Y	Y	Y	Y	Y	72.7
Tomita et al. (2018)	U	Y	U	Y	Y	Y	Y	Y	N	U	Y	63.6
Trotta et al. (2020)	N/A	N/A	Y	Y	Y	N	U	Y	Y	Y	Y	63.6
Ward et al. (2019)	U	Y	Y	Y	Y	Y	Y	Y	N	U	Y	72.7

Weiser et al. (2004)	N/A	N/A	Y	Y	Y	Y	U	Y	Y	Y	Y	72.7
Wilens et al. (2016)	N	Y	Y	Y	Y	N	Y	Y	N	U	Y	63.6
Zammit et al. (2003)	Y	Y	Y	Y	Y	N	U	Y	Y	Y	Y	81.8
Zhang et al. (2018)	N	Y	Y	Y	Y	N	Y	Y	Y	U	Y	72.7
Total %	8.2	32.7	95.9	85.7	81.6	14.3	89.8	100.0	59.2	44.9	100.0	-

Note: *Testing the reciprocal association between smoking and depressive symptoms from adolescence to adulthood: A longitudinal twin study.

Y = Yes; N = No; U = Unclear; N/A = Not applicable. Q1 = Were the two groups similar and recruited from the same population?; Q2 = Were the exposures measured similarly to assign people to both exposed and unexposed groups?; Q3 = Was the exposure measured in a valid and reliable way?; Q4 = Were confounding factors identified?; Q5 = Were strategies to deal with confounding factors stated?; Q6 = Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?; Q7 = Were the outcomes measured in a valid and reliable way?; Q8 = Was the follow up time reported and sufficient to be long enough for outcomes to occur?; Q9 = Was follow up complete, and if not, were the reasons to loss to follow up described and explored?; Q10 = Were strategies to address incomplete follow up utilized?; Q11 = Was appropriate statistical analysis used?

Table S2 – Quality appraisal scores for systematic reviews (n = 4)

Study	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Score %
Ahun et al. (2020)	Y	Y	Y	Y	Y	U	U	Y	U	Y	Y	72.7
Cairns et al. (2014)	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	Y	90.9
Chaiton et al. (2009)	Y	Y	Y	Y	Y	U	U	Y	Y	Y	Y	81.8
Esmaeelzadeh et al. (2018)	Y	Y	Y	Y	Y	U	U	Y	Y	Y	Y	81.8
Total %	100.0	100.0	100.0	100.0	100.0	0.0	25.0	100.0	75.0	100.0	100.0	-

Y = Yes; N = No; U = Unclear; N/A = Not applicable. Q1 = Is the review question clearly and explicitly stated?; Q2 = Were the inclusion criteria appropriate for the review question?; Q3 = Was the search strategy appropriate?; Q4 = Were the sources and resources used to search for studies adequate?; Q5 = Were the criteria for appraising studies appropriate?; Q6 = Was critical appraisal conducted by two or more reviewers independently?; Q7 = Were there methods to minimize errors in data extraction?; Q8 = Were the methods used to combine studies appropriate?; Q9 = Was the likelihood of publication bias assessed?; Q10 = Were recommendations for policy and/or practice supported by the reported data?; Q11 = Were the specific directives for new research appropriate?