

Table 1

Summary of Studies Examining the Hopelessness Theory of Depression

Study	Sample	Age	n	Follow-up interval	Constructs (Measures)	Main Findings
<i>Negative inferential styles characteristics</i>						
Haefffel et al. (2005)	Undergraduate students (135 with remitted depression, 718 healthy controls)	A	853	cross-sectional	MDE (SADS-L); Inferential styles (CSQ)	Negative inferential styles were higher in those with remitted depression than healthy controls.
Hankin (2008)	Community	T	350	5 months	Inferential styles (ACSQ)	Negative inferential styles were found to be relatively stable.
Hankin, Lakdawalla, Carter, Abela, & Adams (2007)	Undergraduate students	A	study 1 = 950 study 2 = 431	cross-sectional	Inferential styles (CSQ); Beck's cognitive vulnerability (DAS); Rumination (RSQ)	In factor analysis, negative inferential styles were distinct from dysfunctional attitudes and rumination.
<i>Developmental antecedents to negative inferential styles</i>						
Gibb & Abela (2008)	High Risk (children of adults with depression)	C	140	12 months	Emotional Abuse (CTQ-EA); Inferential styles (CASQ & CCSQ)	Childhood emotional abuse was associated with negative inferential styles.
Gibb, Alloy, Abramson, & Marx (2003)	Undergraduate students	A	220	cross-sectional	Childhood maltreatment (LEQ); Inferential styles (CSQ)	Childhood emotional abuse, but not physical or sexual abuse, was associated with negative inferential styles.
Gibb, Stone, & Crossett (2012)	High Risk (50% children of adults with depression)	C	100	6 months	Peer Victimization (SEQ); Inferential styles (CASQ & CCSQ)	Relational, but not overt, victimization was associated with negative inferential styles.

Hankin (2005)	Undergraduate students	A	study 1 = 652 study 2 = 72	10 weeks 2 years	Childhood Maltreatment (LEQ & CECA); Inferential styles (CSQ)	Childhood emotional abuse, but not physical or sexual abuse, was associated with negative inferential styles.
Lex & Meyer (2009)	Community	T	196	2 years	Hypomania personality (HPS); Perfectionistic Rigidity (Rigidity scale); Inferential styles (CSQ)	Hypomanic personality and perfectionistic rigidity were not associated with negative inferential styles.
Liu, Choi, Boland, Mastin, & Alloy (2013)	Undergraduate students with history of depression	A	66	4 months	Childhood maltreatment (CTQ); Inferential styles (CSQ)	Childhood emotional abuse, but not physical or sexual abuse, was associated with negative inferential styles.
Mezulis, Hyde, & Abramson (2006)	Community	C	289	2 years	Negative life events (APES); Peer sexual harassment (AAUW); Peer victimization (SEQ); Temperament (CBQ); Parental feedback (CRPR); Parental expression (STA EI); Negative parental inferences (behavioral observation); Inferential styles (CCSQ)	Peer victimization was associated with negative inferential styles. Maternal anger, negative maternal feedback, and a withdrawal negativity temperamental style interacted with negative life events to predict negative inferential styles.
Padilla Paredes & Calvete (2014)	Community	T	1316	longitudinal (duration not specified)	CEA (CTS-PC); Peer emotional abuse (PRQ); Inferential styles (CSQ)	Childhood emotional abuse and peer victimization were associated with negative inferential styles.
Pearson et al. (2013)	Mothers and offspring	A	2528	18 years	Beck's cognitive vulnerability (DAS);	Negative inferential styles in offspring mediated relation

					Inferential styles (CSQ-SF); Major depression (clinical interview)	between maternal self-schemata during pregnancy and depression in offspring.
<i>Negative inferential styles and depression</i>						
Abela, Stolow, Zhang, & McWhinnie (2012)	Undergraduate students	A	60	cross-sectional	Inferential Styles (LSI & CSQ); Beck's cognitive vulnerability (LSI); MDE (SCID)	Negative inferential styles were associated with major depression.
Alloy et al. (2012)	Community	T	413	cross-sectional	Inferential styles (ACSQ); MDE (K-SADS)	Negative inferential styles were associated with past but not current major depression.
Barnum, Woody, & Gibb (2013)	Community (pregnant women in 3 rd trimester)	A	101	8 weeks post-partum	Inferential styles (EASQ modified to include inferences about self and consequences); Depressive symptoms (EPDS)	Negative inferential styles were associated with depressive symptom severity.
Calvete, Orue, & Hankin (2013)	Community	T	1187	6 months	Inferential styles (ACSQ); Depressive symptoms (CES-D)	Negative inferential styles were associated with depressive symptom severity.
Dunbar et al. (2013)	High-risk (children of adults with history of depression)	CT	165	cross-sectional	Inferential styles (ACSQ); Depressive symptoms (K-SADS, CBCL, YSR)	Negative inferential styles were associated with depressive symptom severity.
Fletcher, Parker, & Manicavasagar (2013)	Clinical (109 depressed, 100 healthy controls, 94 bipolar I, 114 bipolar II)	A	381	cross-sectional	Inferential styles (ISQ); Depressive symptoms (QIDS-SR)	Negative inferential styles were associated with depressive symptom severity.

Haefel (2011)	Undergraduate students	A	87	1 week	Inferential styles (CSQ); Event-specific inferences (PIQ); Depressive symptoms (MASQ)	Negative inferential styles were associated with depressive symptom severity.
Haefel et al. (2005)	Undergraduate students (135 with remitted depression, 718 healthy controls)	A	853	cross-sectional	Inferential styles (CSQ); MDE (SADS-L)	Negative inferential styles were associated with remitted major depression.
Hamilton et al. (2013)	Community	T	301	9 months	Inferential styles (ACSQ); Depressive symptoms (CDI)	Negative inferential styles were associated with depressive symptom severity.
Hong (2013)	Undergraduate students	A	study 1 = 140 study 2 = 210	4 weeks	Inferential styles (CSQ); Depressive symptoms (BDI-II & IDAS)	Negative inferential styles were associated with depressive symptom severity.
Hong, Gwee, & Karia (2006)	Undergraduate students	A	242	6 weeks	Inferential styles (CSQ); Specific inferences (SIQ); Hopelessness (BHS); HD symptoms (CESD-HD)	Negative inferential styles were associated with hopelessness depression symptom severity through the mediational effect of hopelessness.
Mezulis & Rudolph (2012)	Community	T	113	8 weeks	Inferential styles (EA-ACSQ); Depressive symptoms (CDI-S)	Negative inferential styles were associated with depressive symptom severity.
Nusslock et al. (2011)	Undergraduate students with no history of	A	40	at least 1 year (mean = 3 years)	Inferential styles (CSQ); MDE (SADS-C)	Negative inferential styles were associated with onset of major and minor depression.

O'Connor, Connery, & Cheyne (2000)	depression Patients with self-harm and controls admitted to the same emergency department	A	40	cross-sectional	Inferential styles (CSQ); Hopelessness (BHS); Depressive symptoms (HADS)	Negative inferential styles were associated with hopelessness and depressive symptom severity.
Rose, Abramson, Hodulik, Halberstadt, & Leff (1994)	134 clinical inpatients and 54 health controls	A	188 (106 for diagnostic comparisons)	cross-sectional	MDE (SADS-L); Lifetime % depressed (LDI); Inferential styles (ISQ)	Negative inferential styles were associated with major depression.
Sutton et al. (2011)	Community	T	550	cross-sectional	Inferential styles (CSQ); Neuroticism (IPIP-NEO-PI-R); Beck's cognitive vulnerability (DAS); Depressive symptoms (IDD & MASQ)	Negative inferential styles were associated with depressive symptom severity, but overlapped with other depressogenic vulnerabilities.
Young, LaMontagne, Dietrich, & Wells (2012)	Community	T	111	cross-sectional	Inferential styles (CCSQ); Rumination (RRS); Beck's cognitive vulnerability (DAS); Depressive symptoms (CES-DC)	Negative inferential styles were associated with depressive symptom severity, but not after accounting for rumination.
Zhou, Chen, Liu, Lu, & Su (2013)	Undergraduate students	A	426	cross-sectional	Inferential styles (CSQ-SF); Hopelessness depression symptoms (HDSQ)	Negative inferential styles were associated with hopelessness depression symptom severity.
<i>Life events and the hopelessness theory</i> Abela (2001)	Community	C	382	6 weeks	Inferential styles	Negative inferential styles

					(CASQ & CCSQ); Negative life events (CLES); Depressive symptoms (CDI); Hopelessness (HSC)	interacted with life stressors to predict depressive symptom severity in girls but not boys. Hopelessness did not mediate this association.
Abela, Aydin, & Auerbach (2006)	Adults with current or history of depression	A	102	54 weeks	Inferential styles (EASQ & CSQ); Hassles (HS); Depression symptoms (BDI)	Depressogenic weakest link interacted with daily hassles to predict depressive symptom severity.
Abela, Brozina, & Seligman (2004)	Undergraduate students	A	165	5 weeks	Inferential styles (CSQ & EASQ); Negative life events (NLEQ); Depressive symptoms (BDI)	Primed negative inferential styles interacted with life stressors to predict depressive symptom severity.
Abela & McGirr (2007)	High-risk (children of adults with history of depression)	C	140	12 months	Inferential styles (CASQ & CCSQ); Daily hassles (CHAS); Depressive symptoms (CDI)	Depressogenic weakest link interacted with daily hassles to predict depressive symptom severity in girls but not boys.
Abela, McGirr, & Skitch (2007)	Community	C	382	6 weeks	Inferential styles (CASQ & CCSQ); Negative life events (CLES); Depressive symptoms (CDI)	Depressogenic weakest link interacted with life stressors to predict depressive symptom severity.
Abela, Parkinson, Stolow, & Starrs (2009)	Community	T	367	6 weeks	Inferential styles (CASQ & CCSQ); Negative life events (CLES); Depressive symptoms (CDI)	Depressogenic weakest link interacted with life stressors to predict symptoms of hopelessness depression not general depression.

Abela & Payne (2003)	Community	C	314	6 weeks	Inferential styles (CASQ & CCSQ); Hassles (CHAS); Depressive symptoms (CDI)	Negative inferential styles interacted with hassles to predict symptoms of hopelessness depression not non-hopelessness depression.
Abela & Sarin (2002)	Community	C	79	10 weeks	Inferential styles (CASQ & CCSQ); Negative life events (CLES); Depressive symptoms (CDI)	Depressogenic weakest link interacted with hassles to predict symptoms of hopelessness depression not non-hopelessness depression.
Abela & Seligman (2000)	Community	T	study 1 = 149	3 days	Inferential styles (EASQ & CSQ); Depressive symptoms (MAACL)	Negative inferential styles interacting with life stressors were associated with depressive symptom severity currently but not three days later.
	Undergraduate students	A	study 2 = 77	3 days	Inferential styles (EASQ & CSQ); Depressive symptoms (MAACL)	
Abela et al. (2011)	Community	T	1150	6 months	Inferential styles (ACSQ); Negative life events (ALEQ); Depressive symptoms (CES-D); Anxiety symptoms (MASC)	Negative inferential styles interacted with life stressors to predict depressive, but not anxious, symptom severity.
Auerbach & Ho (2012)	Community	T	179	18 weeks	Inferential styles (ACSQ); Negative life events (ALEQ); Depressive symptoms (CES-D)	Negative inferential styles interacted with interpersonal peer stressors to predict depressive symptom severity.
Brozina & Abela	Community	C	418	6 weeks	Inferential styles	Negative inferential styles

(2006)

Calvete, Villardón, & Estévez (2008)	Community	T	856	6 months	(CASQ & CCSQ); Hassles (CHAS); Depressive symptoms (CDI); Anxiety symptoms (MASC) Inferential styles (ACSQ); Negative life events (APES); Depressive symptoms (YSR)	interacted with hassles to predict depressive symptom severity. Negative inferential styles predicted anxiety symptom severity. Negative inferential styles interacted with life stressors to predict depressive symptom severity.
Cohen, Young, & Abela (2012)	Community	C	206	7 weeks	Inferential styles (CASQ & CCSQ); Negative life events (CLES); Depressive symptoms (CDI)	Negative inferential styles interacted with life stressors to predict depressive symptom severity.
Gibb, Beevers, Andover, & Holleran (2006)	Undergraduate students	A	162	6 weeks	Inferential styles (CSQ); Negative life events (HUS); Depressive symptoms (BDI-II)	Negative inferential styles interacted with life stressors to predict depressive symptom severity.
Haeffel, Abramson, Brazy, & Shah (2008)	Undergraduate students	A	248	5 weeks	Inferential styles (CSQ); Negative life events (ALEQ); Depressive symptoms (BDI)	Negative inferential styles interacted with life stressors to predict depressive symptom severity.
Haeffel & Vargas (2011)	Undergraduate students	A	128	4 weeks	Inferential styles (CSQ); Life events (ALEQ); Depressive symptoms (BDI)	Negative inferential styles interacted with life stressors to predict depressive symptom severity.
Hankin (2008b)	Community	T	350	5 months	Inferential styles (ACSQ); Negative life	Negative inferential styles interacted with life stressors to

					events (ALEQ); Depressive symptoms (CDI); General internalizing and externalizing symptoms (SDQ); Anxiety symptoms (MASQ)	predict depressive symptom severity, but not anxious symptoms or general internalizing or externalizing symptoms.
Hankin (2010)	Undergraduate students	A	210	35 days	Inferential styles (CSQ); Daily stressors (Daily Diary Form); Depressive symptoms (BDI)	Negative inferential styles interacted with daily stressors to predict depressive symptom severity.
Hankin, Abramson, Miller, & Haeffel (2004)	Undergraduate students	A	233 (75 for analyses relating to diagnoses)	2 years	Inferential styles (CSQ); Beck's cognitive vulnerability (DAS); Negative life events (NLEQ); MDE (SADS-L); Anxiety symptoms (SADS-L)	The interaction between negative inferential styles and life stressors was associated with depressive episodes, but not anxiety disorders. This interaction became non-significant after accounting for the interaction between negative self-schemata and life stressors.
Kercher & Rapee (2009)	Community	T	756	6 months	Inferential styles (ACSQ); Negative life events (ALEQ); Depressive symptoms (CES-D)	Negative inferential styles interacted with life stressors to predict depressive symptom severity.
Lakdawalla & Hankin (2008)	Undergraduate students	A	233	2 years	Inferential styles (CSQ); Negative life events (NLEQ); Depressive symptoms (BDI)	Negative inferential styles interacted with life stressors to predict depressive symptom severity.

Lee, Hankin, & Mermelstein (2010)	Community	T	350	10 weeks	Inferential styles (ACSQ); Family and peer relationships (NRI); Depressive symptoms (CDI)	Negative inferential styles interacted with parental interactions to predict depressive symptom severity.
Metalsky & Joiner (1992)	Undergraduate students	A	152	5 weeks	Inferential styles (CSQ); Negative life events (NLEQ); Depressive symptoms (BDI); Anxiety symptoms (STAI); Hopelessness (EHS)	Negative inferential styles interacted with life stressors to predict depressive, but not anxious, symptom severity through the partial mediation of hopelessness.
Mezulis, Funasaki, Charbonneau, & Hyde (2010)	Community	T	366	4 years	Inferential styles (CCSQ); Negative life events (APES); Depressive symptoms (CDI)	Negative inferential styles interacted with life stressors to predict depressive symptom severity in girls but not boys.
Rood, Roelofs, Bögels, & Meesters (2012)	Community	CT	805	cross-sectional	Inferential styles (ACSQ); Negative life events (CLES); Depressive symptoms (CDI)	The interaction between negative inferential styles and life stressors was associated with depressive symptom severity in boys but not girls.
Stange, Alloy, Flynn, & Abramson (2013)	Community	T	256	9 months	Inferential styles (ACSQ); Negative life events (ALEQ & LEI); Depressive symptoms (CDI)	A main effect was found for negative inferential styles predicting depressive symptom severity. No interaction with life stressors was observed.
Stone, Gibb, & Coles (2010)	Undergraduate students	A	458	6 months	Inferential styles (CSQ); Negative life events (LES); Depressive symptoms (BDI-II)	Negative inferential styles interacted with life stressors to predict depressive symptom severity in men but not women.

Hopelessness Depression

Abela, Gagnon, & Auerbach (2007)	Children with clinically significant depressive symptoms	C	39	cross-sectional	Hopelessness (HSC); Depressive symptoms (K-SADS, CDI & CBCL)	Hopelessness depression displayed good internal consistency. Hopelessness was more strongly related to hopelessness depression symptoms than to non-hopelessness depression symptoms.
Haslam & Beck (1994)	Outpatients with depression	A	531	cross-sectional	Depressive symptoms (BDI)	Hopelessness depression displayed poor internal consistency.
Joiner et al. (2001)	Outpatients Outpatients Outpatients Air Force Cadets	A A A A	study 1 = 1604 study 2 = 844 study 3 = 680 study 4 = 1404	cross-sectional	Depressive symptoms (BDI)	Support was found for a distinct cluster of hopelessness depression symptoms, for which a small but significant difference from other depressive symptoms was observed
Whisman, Miller, Norman, & Keitner (1995)	Inpatients with depression	A	80	cross-sectional	Hopelessness (BHS); Depressive symptoms (BDI & modified HRSD)	Partial support was found for a relation between hopelessness and hopelessness depression symptoms. Hopelessness depression displayed poor internal consistency.
Whisman & Pinto (1997)	Inpatients with depression	T	160	cross-sectional	Hopelessness (HSC); Depressive symptoms (BDI)	Hopelessness depression was found to have a continuous rather than categorical latent structure. Hopelessness was more strongly related to hopelessness depression symptoms than to non-hopelessness depression

symptoms.

Negative inferential styles and self-injurious thoughts and behavior

Hankin & Abela (2011)	Community	T	103	2.5 years	Inferential styles (ACSQ); Non-suicidal self-injury (FASM)	Negative inferential styles predicted non-suicidal self-injury.
Kleiman, Law, & Anestis (2014)	Undergraduate students with elevated depressive symptoms	A	245	6-8 weeks	Inferential styles (CSQ); Thwarted belongingness and perceived burdensomeness (INQ); Suicidal ideation (BSS)	Negative inferential styles were associated with suicidal ideation. Thwarted belongingness and perceived burdensomeness mediated this relation.
O'Connor et al. (2000)	Patients with self-harm and controls admitted to the same emergency department	A	40	cross-sectional	Inferential styles (CSQ); Hopelessness (BHS); Depressive symptoms (HADS)	Negative inferential styles were marginally associated with self-harm.

Positive inferential styles, adaptive inferential feedback, and recovery from depression

Dobkin et al. (2007)	Community and physician referral with depression	A	10	18-22 weeks	Inferential styles (IQ); MDE (SCID); Depressive symptoms (BDI & HRSD)	Adaptive inferential feedback was associated with less negative inferential styles and depressive symptom severity.
Dobkin, Panzarella, Fernandez, Alloy, & Cascardi (2004)	Undergraduate students	A	150	cross-sectional	Inferential styles (CSQ); Depressive symptoms (MAACL)	Adaptive inferential feedback was associated with less negative inferential styles and depressive symptom severity.
Lex & Meyer (2009)	Community	T	196	2 years	Hypomania personality (HPS); Perfectionistic Rigidity (Rigidity scale); Inferential styles	Positive inferential styles were positively associated with hypomanic personality and perfectionistic rigidity.

O'Connor et al. (2000)	Patients with self-harm and controls admitted to the same emergency department	A	40	cross-sectional	(CSQ) Inferential styles (CSQ); Hopelessness (BHS); Depressive symptoms (HADS)	No association was found positive inferential styles and self-harm.
Peters, Constans, & Mathews (2011)	Undergraduate students	A	54	cross-sectional	Inferential styles (Custom event-specific questions); Depressive symptoms (Profile of Mood States)	Cognitive bias modification training for positive attributions was associated with reduced likelihood of making negative self-inferences and reduction in depressive symptom severity.
Rose et al. (1994)	134 clinical inpatients and 54 health controls	A	188 (106 for diagnostic comparisons)	cross-sectional	MDE (SADS-L); Lifetime % depressed (LDI); Inferential styles (ISQ)	Positive inferential styles were negatively associated with major depression.

Note: C = child, T = teenager, A = adult; AAUW = American Association of University Women Survey of Sexual Harassment; ACSQ = Adolescent Cognitive Style Questionnaire; ALEQ = Adolescent Life Events Questionnaire; APES = Adolescent Perceived Events Scale; BDI = Beck Depression Inventory; BDI-II = Beck Depression Inventory-II; BHS = Beck Hopelessness Scale; BSS = Beck Scale for Suicidal Ideation; CASQ = Children's Attributional Style Questionnaire; CBCL = Child Behavior Checklist; CBQ = Child Behavior Questionnaire; CCSQ = Children's Cognitive Style Questionnaire; CDI = Children's Depression Inventory; CDI-S = Children's Depression Inventory – Short Version; CECA = Childhood Experience of Care and Abuse Interview; CES-D = Center for Epidemiologic Studies Depression Scale; CES-DC = Center for Epidemiologic Studies Depression Scale for Children; CESD-HD = Center for Epidemiologic Studies Depression Scale – Hopelessness Depression; CHAS = Children Hassles Scale; CLES = Children's

Life Events Scale; CRPR = Child-Rearing Practices Report; CSQ = Cognitive Style Questionnaire; CSQ-SF = Cognitive Style Questionnaire – Short Form; CTS-PC = Conflict Tactics Scales Parent-to-Child; CTQ = Childhood Trauma Questionnaire; CTQ-EA = Childhood Trauma Questionnaire – Emotional Abuse Subscale; DAS = Dysfunctional Attitude Scale; EA-ACSQ = Event Anchored Adolescent Cognitive Style Questionnaire; EASQ = Expanded Attributional Style Questionnaire; EHS = Extended Hopelessness Scale; EPDS = Edinburgh Postnatal Depression Scale; FASM = Functional Assessment of Self-Mutilation; HADS = Hospital Anxiety and Depression Scale; HDSQ = Hopelessness Depression Symptom Questionnaire; HPS = Hypomanic Personality Scale; HRSD = Hamilton Rating Scale for Depression; HS = Hassles Scale; HSC = Hopelessness Scale for Children; HUS = Hassles and Uplift Scale; IDAS = Inventory of Depression and Anxiety Symptoms; IDD = Inventory to Diagnose Depression; INQ = Interpersonal Needs Questionnaire; IPIP-NEO-PI-R = International Personality Item Pool-NEO-PI-R; ISQ = Inferential Styles Questionnaire; K-SADS = Schedule for Affective Disorders and Schizophrenia for School-Age Children; LEI = Life Events Interview; LDI = Lifetime Depression Index; LEQ = Life Experiences Questionnaire; LES = Life Events Scale; LSI = Life Story Interview; MAACL = Multiple Affect Adjective Check List; MASC = Multidimensional Anxiety Scale for Children; MASQ = Mood and Anxiety Symptom Questionnaire; NLEQ = Negative Life Events Questionnaire; NRI = Network of Relationships Inventory; PIQ = Particular Inference Questionnaire; PRQ = Peer Relations Questionnaire; QIDS-SR = Quick Inventory of Depressive Symptomatology-Self-Report; RRS = Ruminative Response Scale; RSQ = Response Styles Questionnaire; SADS-C = Schedule for Affective Disorders and Schizophrenia–Change; SADS-L = Schedule for Affective Disorders and Schizophrenia Lifetime; SCID = Structured Clinical

Interview for DSM; SEQ = Social Experiences Questionnaire; SIQ = Specific Inferences Questionnaire; STAEI = State-Trait Anger Expression Inventory; STAI = State-Trait Anxiety Inventory; YSR = Youth Self-Report