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Interpersonal psychotherapy for depressed adolescents: a systematic review of quantitative studies exploring effectiveness, concomitant findings, and mediating and moderating variables

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INTERPERSONAL PSYCHOTHERAPY FOR DEPRESSED ADOLESCENTS: A
SYSTEMATIC REVIEW OF QUANTITATIVE STUDIES EXPLORING EFFECTIVENESS,
CONCOMITANT FINDINGS, AND MEDIATING AND MODERATING VARIABLES

A clinical dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Psychology

by

Luke Rex

July, 2022

Natasha Thapar-Olmos, PhD - Dissertation Chairperson

This clinical dissertation, written by

Luke Rex

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Natasha Thapar-Olmos, PhD, Chairperson

Louis Cozolino, PhD, Committee Member

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DEDICATION

For Mum (mom) and Dad.

Mum – I know you are smiling down from above with a super proud halo on.

Dad – this would not have occurred without your encouragement to return to school.

I love you both.

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First, a big thank you to my Dissertation Chair, Dr. Natasha Thapar-Olmos, for pushing me throughout this process in all areas: to write clearer, more economically, and to push my mind to the brink. I really appreciated your guidance on this and your sense of humor and calm. You have helped me to achieve my best! Thank you to my dissertation committee member, Dr. Louis Cozolino, for his insight and validation of my developing ideas and encouragement to keep thinking critically. To my amazing research assistants, Julie and Emily – I am so grateful for having you on board throughout this journey! Thank you to Amy Gralewski (editor) who combed through this dissertation tooth and nail to help with all the fine details to get this ready for publication! Great job Amy! Thank you as well to the many people in my personal and professional life who have supported me through the years, especially since returning to school as a mid 30-year-old. In gratitude to David Sedghi, brilliant professor, who inspired me and pointed me in the right direction when needed. To my immediate family, Joshua and Sophia and all the nieces and nephew, thank you for all the words of encouragement over the years. To David and Claire, what can I say? It's been a trip! To Wendy and Elisa – Encino crew forever! And thank you Dr. Eromo for being an awesome supervisor. To the class of 2022 – we did it! I love you guys. To Monica, Joann, Riley, Dr. Jessi, Mimi, Dr. Petersen and the TTC crew – what a team! To Danielle, Elisa, JB, Greg, Jared, Brian, Jannica, Jaime, Rob and Jen, Jonathan, and Elijah – thanks for the friendship and support!

Last, a big hug and heartfelt thanks to Dr. Anat Cohen, my clinical supervisor at Pepperdine Encino Clinic for 3 years throughout the doctorate. You have been a tremendous source of support!

VITA

EDUCATION

2022	PsyD in Clinical Psychology Pepperdine University
2018	MA Psychology Pepperdine University
2016	Bachelor of Arts The University of California, Los Angeles Major in Psychology Minor in Theater
2013-2014	Los Angeles City College <i>transfer to UCLA</i>
2000-2002	The University of New South Wales, Australia <i>partial credits toward BA</i>
1983-1992	St Aloysius College, Sydney Australia

OTHER EDUCATIONAL EXPERIENCE

1999	The Lee Strasberg Theater & Film Institute, New York
1994-1996	Diploma in Acting The Sydney Acting School, Australia

Background

Luke is one of the leading drama group facilitators for young people and adults in intensive outpatient (IOP), partial hospitalization (PHP) and residential treatment centers (RTC) in Los Angeles, having led in excess of 3500 groups to date. With a background as a professional actor (SAG/AEA) and acting teacher for teenagers since 1996 in both Australia and the United States, combined with his formal studies in psychology at UCLA and Pepperdine University, Luke's approach within the mental health industry is both unique and dynamic. Luke's groups serve individuals who are experiencing a vast array of mental and behavior health concerns including addiction, depression, suicidal ideation, self-harm and mood disorders.

CLINICAL TRAINING EXPERIENCES

Pre-doctoral Intern

Tarzana Treatment Centers

July 2021 – (present)

Primary Supervisor: Tim Petersen, PsyD

Delegated Supervisor: Mimi Curtis, PsyD

Overview:

- Conducted in person therapy sessions for both mental health and substance use patients.
 - Numerous safety assessments, DCFS experience.

- Intake and diagnosis, case conceptualization, report writing, phone sessions, telehealth-video sessions.
- Worked with youth within the juvenile justice system
 - Court reports, phase/treatment work.
- Liased with multiple departments in the coordination of Pt care.
- Group work
- Handled transfer cases of longer term clients seamlessly and professionally.
- Utilized supervision in a non-defensive manner.
- Participated in case conferences, in-service didactic trainings, ARS, PDG.

Doctoral Trainee

Pepperdine Community Clinic Encino

September 2018 – (June 2021)

Clinical Director | Individual and Group Supervisor: Anat Cohen PhD

Group Supervisor: Tamara Levy Eromo PsyD

Overview:

- Conducted in person therapy sessions (longer-term therapy), phone and video sessions, intake and diagnosis, case conceptualization, report writing, phone sessions, telehealth-video sessions.
- Handled transfer cases of longer term clients seamlessly and professionally.
- Utilized supervision in a non-defensive manner.
- Administrated and interpreted outcome measures (OQ.43, PHQ-9), and measures of the therapeutic alliance (WAIS).
- Served as an on-call therapist for crisis counseling.
- Participated in case conferences and in-service didactic trainings.
- **Outreach:** Served local schools to disseminate and present information on “bullying.”
- Participated in peer supervision initiative as peer supervisor to first and second year students.

Doctoral Trainee

LGBT Center Los Angeles

Group Supervisor: Shain Miller, PsyD | Individual Supervisor: Michael Comish LMFT

Associate Director/Manager of Clinical Programs: Amy R. Kane LMFT

September 2019 – September 2020

Overview:

- Received 80 hours of training (10 x 8hr didactic training sessions) in order to work effectively with the LGBTQ+ population. Topics included:
 - LGBTQ+ Affirmative & Specific Counseling, Crisis Intervention, Assessing and Intervening with Suicidality and Homicidality, Brief Treatment, Diagnosis, HIV/AIDS, LGBTQ+ Intimate Partner Violence, Substance Use & Abuse, Trauma-informed Care/Vicarious Trauma/Self-Care, Multicultural Counseling/Racism and Oppression.
- Conducted in-person therapy sessions, telehealth (phone and video interventions), intake and diagnosis, case conceptualization, treatment planning, report writing.
- Provided crisis assessment and intervention, and empirically supported brief therapy.
- Co-facilitated *Relapse Prevention Program* group therapy (relapse prevention) for 16 weeks
 - Led relaxation and meditation exercises
 - Facilitated empty chair techniques
 - Provided psychoeducation on addiction
- Worked with 10 individual clients per week.

OTHER CLINICAL EXPERIENCE

Psychodrama/Acting Process Group Facilitator

Peggy Albrecht Friendly House (RTC)

2017-Present

- Group leader and facilitator leading drama groups for this non-profit all women's recovery residential treatment center. Clients within this homogenous population are struggling with an array of substance abuse disorders, co-morbidity and dual diagnosis.
- Created group entitled *acting process*: synthesis of acting techniques and counseling theories aimed at helping clients gain greater insight into their intrapersonal and interpersonal struggles. In addition, groups help clients to become more comfortable within their own vulnerability, build self-esteem and confidence, and assist with client's inner discovery and emotional expression.

Acting Process Group Facilitator (Drama/Improv/Psychodrama)

Evolve Treatment Centers (IOP/PHP/RTC)

2015 – 2021

- Created a unique group entitled *acting process*: a synthesis of acting techniques and counseling theories aimed at helping clients gain greater insight into their intrapersonal and interpersonal struggles.
- Working with clients struggling with a diverse range of mental health disorders: substance abuse disorders, depressive disorders (major, dysthymia, disruptive mood dysregulation), bipolar disorder I & II, eating disorders, posttraumatic stress disorder, anxiety disorders (including social anxiety), obsessive-compulsive disorder, panic disorder, personal history of self harm, trauma and stressor related disorders, disruptive, impulse-control and conduct disorders (oppositional defiant disorder), parent-child relational problems, academic or educational problems, personal history of physical abuse, schizoaffective disorder, attention-deficit/hyperactivity disorder, and gender dysphoria in adolescents.

Acting Process Group Facilitator (Drama/Improv/Psychodrama)

Insight Treatment Programs (IOP)

2018 – 2021

- Group leader and facilitator running drama/experiential groups for teens struggling with addiction and mental/behavioral health concerns within intensive outpatient.
- Created group entitled *acting process*: a synthesis of acting techniques and counseling theories aimed at helping clients

Psychodrama/Acting Process Group Facilitator

Resolve Recovery (RTC)

2016–2019

- Group leader and facilitator leading drama groups for this non-profit all women's recovery residential treatment center in Hollywood. Clients within this population are struggling with an array of substance abuse disorders, co-morbidity and dual diagnosis.

- Created group entitled *acting process*: synthesis of acting techniques and counseling theories aimed at helping clients gain greater insight into their intrapersonal and interpersonal struggles.

Acting Process Group Facilitator

Visions Adolescent Treatment Center (IOP/RTC)

2015 – 2019

- Group leader and facilitator running drama/experiential groups for teens struggling with addiction and mental/behavioral health concerns within intensive outpatient, and residential treatment programs.
- Created group entitled *acting process*: a synthesis of acting techniques and counseling theories aimed at helping clients gain greater insight into their intrapersonal and interpersonal struggles.
- Integrated and revitalized Gestalt psychology ‘empty chair’ exercise with acting techniques to offer clients richer experiences within the established role-playing format.
- Groups incorporate and embrace the concept of ‘group cohesion’ as a therapeutic tool to enhance client’s experience by aiding in fostering vulnerability and emotional expression.

Psychodrama/Acting Process/Group Facilitator

Bel Air Treatment (IOP)

2015 – 2018

- Group leader and facilitator running drama groups for adults struggling primarily with addiction, and mental/behavioral health concerns. Facilitated up to 9 groups per week.
- Fashioned and developed a unique group entitled *acting process*: a synthesis of acting techniques and counseling theories aimed at helping clients gain greater insight into their intrapersonal and interpersonal struggles.
- Assisted clients with emotional regulation and distress tolerance by incorporating aspects of mindfulness, spirituality and meditation techniques.

Psychodrama/Acting Process Group Facilitator

Core (IOP)

2017- 2019

- Group leader and facilitator leading drama groups for adults struggling with addiction and mental/behavioral health concerns.
- Created group entitled *acting process*: synthesis of acting techniques and counseling theories aimed at helping clients gain greater insight into their intrapersonal and interpersonal struggles.

Psychodrama/Acting Process Group Facilitator

Launch (Young Adult Empowerment Center)

2017-2018

- Group leader and facilitator leading drama groups for teens struggling with addiction and mental/behavioral health concerns.

- Groups help teens to gain greater insight and clarity into their internal conflicts and interpersonal relationships.

TEACHING EXPERIENCE

Owner/Artistic Director

L.A. Rex Acting Studio

2013-Present

- “L.A Rex Acting Studio” offers technique/scene study courses, as well as private coaching services for actors in Hollywood and the greater Los Angeles area. The studio is committed to the synthesis of psychology and acting, as both a healing modality, and as a way to help actors do their best work.

Faculty Member/Associate/Guest Teacher

The Young Actor’s Studio, North Hollywood

2009-2018

- Acting technique and scene study teacher to students aged 8 to young adults. Technique focuses on the fundamentals of the Stanislavski System, the work of Lee Strasberg, improvisation, voice, comedy and drama. Techniques are incorporated into scene study and play productions, as well as self-devised pieces. Emphasized the uniqueness of each student, empowering individuals to create truthfulness into their acting by a process of allowing themselves to be, rather than getting in the way.
- Created a play for 14 teens, presented at the culmination of the 2015 summer intensive program, centered around the theme of ‘connections’.

Guest Faculty Teacher, Acting Coach and Director

St Aloysius College, Sydney Australia

1997-2000

- Worked as a guest teacher, acting coach and director for one of Australia’s leading private schools drama departments.

OTHER WORK EXPERIENCE

Professional Actor (Screen Actors Guild [SAG] & Actors Equity Association [AEA]).

Sydney | New York | Los Angeles

1996 –

- Worked on numerous projects in film, television and theater.
- Led teams of people directing plays, short films and projects.

Account Development Representative/Junior Account Executive

Blackbaud, Sydney Australia

2005-2006

- Worked as a sales representative and account executive for a software company devoted to empowering non-profits to build client relationships and fundraising.

Production Assistant/Production Coordinator

Beyond Productions, Sydney Australia

1996

- Worked in a production office on a high paced television series, assisting staff across all key production areas.

VOLUNTEER WORK

House Mentor

The Los Angeles Youth Network

2012-2015

- Mentored youth in a transitional living program.
- Ran a bi-weekly group designed to inspire, motivate and engage.
- Provided academic support.
- Co-facilitated groups with art therapist.

Tutor/Mentor

School on Wheels

2012 – 2013

- Tutored and mentored youth at *Casa Libre Freedom House* on a weekly basis.

Volunteer

Get Love

2009

- Assisted in the feeding of the homeless in the Hollywood district.

Director/Acting teacher

Short and Sweet Play Festival, Sydney Australia

2003-2005

Director/Acting Coach

Page to Stage Young Writer's Festival, Sydney, Australia

1998

GRANTS, HONORS & SCHOLARSHIPS

2016- 2019	Colleagues Grant MA Psychology (Pepperdine)
2014-2015	Dean's List, College of Sciences (UCLA)
2014-2016	Scholarship Recognition Award
2013-2014	Deans List (LACC and LAVC)

AWARDS

2002	Best International Feature Film "Picto-Crime"
	New York International Independent Film & Video Festival
2003	Short & Sweet Play Festival Audience Favorite Award

PROFESSIONAL AFFILIATIONS

2020 -	Los Angeles County Psychological Association (Graduate Student Affiliate)
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2018-	American Psychological Association (Graduate Student Affiliate)
2018-	APA Division 2: Society for the Teaching of Psychology
	APA Division 8: Society for Personality and Social Psychology
	APA Division 10: Society for the Psychology of Aesthetics, Creativity and the Arts.
	APA Division 29: Society for the Advancement of Psychotherapy
	APA Division 32: Society for Humanistic Psychology
	APA Division 36: Society for the Psychology of Religion and Spirituality
	APA Division 46: Society for Media Psychology and Technology
	APA Division 47: Society for Sport, Exercise and Performance
	APA Division 48: Society for Study of Peace, Conflict, and Violence
	APA Division 49: Society of Group Psychology and Group Psychotherapy
	APA Division 50: Society of Addiction Psychology
2015	Alpha Lambda Delta and Phi Eta Sigma Honors Society
2012-Present	The Screen Actors Guild and American Federation of Television and Radio Artists (SAG/AFTRA)
2006-Present	Actors Equity Association (AEA)
2008-Present	American Society of Composers, Performers and Publishers (ASCAP)

INTERESTS & MEMBERSHIPS

2014	Vice President Los Angeleno Club (LACC)
2010-Present	Ranch Park Golf Men's Club (RPGC)
2010-Present	Southern California Golf Association (SCGA)
20009-Present	Southern California Public Radio (KPCC)
2012-Present	Self Realization Fellowship (SRF)

ABSTRACT

Depression is one of the leading causes of illness and disability among adolescents. According to the National Institute of Mental Health (2022), almost one-fifth of adolescents ages 12 to 17 years in the United States had at least one major depressive episode in 2020, representing 4.1 million people, and over half did not receive any treatment. An interpersonal approach to therapy for adolescents known as Interpersonal Psychotherapy for Depressed Adolescents (IPT-A), developed by Dr. Laura Mufson, has been regarded as having well-established efficacy in treating depressed adolescents. This systematic review of quantitative studies (without meta-analysis) was conducted to (a) examine the effectiveness of IPT-A and its adaptations in reducing depression across randomized control trials (RCTs); (b) summarize and synthesize the concomitant findings associated with implementation across these RCTs and a range of other quantitative designs, including SMART designs and single group pretest–posttest; and (c) identify potential mediating and moderating factors associated with the effectiveness of IPT-A. Data were collected across three electronic databases and included peer-reviewed, English language articles that were published between 1994–2020. The review also included group adaptations of IPT used in developing countries (IPT-G) and a variety of IPT-A adaptations including greater parent involvement (IPT-AP), a briefer version of IPT-A (BIPT-A), and a stepped care model (SCRIPT-A). A total of 28 studies were included in this systematic review; 14 addressed the question of effectiveness and a further 14 addressed the question of potential variables of mediation and moderation. Results showed IPT-A is an effective intervention for depressed adolescents and further dissemination in multiple settings would benefit a range of stakeholders. It works in both a group or individual format and is efficacious among varied ethnicities, including with the LatinX community. Last, the approach stimulates the discussion

on the fluid relationships between attachment styles and interpersonal relationships, and this relationship to depression.

Chapter 1: Background and Rationale

Statement of the Problem

According to the World Health Organization (2021), depression is considered one of the predominant causes of illness and disability in adolescents 10–19 years of age and the leading cause of disability worldwide with approximately 264 million people suffering to date. Results of the 2020 National Survey on Drug Use and Health showed 4.1 million adolescents in the United States between the ages of 12 and 17 years experienced at least one major depressive episode in 2019 (Substance Abuse and Mental Health Services Administration, 2021). This represents 17% of the U.S. adolescent population (not inclusive of homelessness or incarcerated individuals, thus the number is likely higher). Additionally, adolescents reporting two or more races were understood to have the highest prevalence rate of major depression in the country, comprising 16.9% of the demographic in 2017 (National Institute of Mental Health [NIMH], 2022), and by 2020 this had risen to 29.9%, an increase of 77% (NIMH, 2022).

Adolescence marks an intense period of biological, psychological, and social development and has often been labeled by developmental theorists as a period of storm and stress (Casey et al., 2010). It has been proposed that individuals between the ages of 12 and 18 years are in the Identity vs. Role Confusion stage of their psychosocial development (Erikson, 1950), and in this search for identity, a range of psychological disorders develop, namely internalizing disorders such as depression and anxiety (E. J. Costello et al., 2011). Where peer connection and social support serve as protective factors against mental health issues on the one hand, rejection and perceived loneliness serve as risk factors on the other (Hall-Lande et al., 2007; Luo et al., 2017; Miloseva et al., 2017). Further vulnerability to mood disorders arises in adolescence due to the inability of youth to develop neural structures to regulate their heightened

emotionality (Ahmed et al., 2015; Cozolino & Santos, 2014; Guyer et al., 2016). Additionally, from a neuroscientific perspective, low levels of serotonin combined with social withdrawal and isolation leave adolescents susceptible to depression (Cozolino, 2014), highlighting the impactful presence of nature and nurture throughout development. Researchers from Macquarie University in Sydney, Australia, stated, “Rather than seeing adolescence as a critical risk period for psychopathology in general, it appears that this developmental stage generates risk for a relatively specific set of mental disorders” (Rapee et al., 2019, p. 2), which the researchers referred to as social-emotional disorders. One of these disorders, depression, is seen to have an elevated incidence during the adolescent developmental period, particularly for females (Essau et al., 2000; Essau et al., 2010; Pérez & Gaviña, 2015; Rapee et al., 2019).

Between the years 2017 and 2020, prevalence rates of depression among female and male adolescents have increased significantly in the United States. One in five teenage girls experienced a major depressive episode in 2017 compared to 6.8% of male teenagers (NIMH, 2022). In 2020, these numbers rose to 25.2% for females and 9.2% for males (NIMH, 2022), an increase of approximately 26% for females and a 35% increase for males. One reason for the disparity between genders could be due to the social theory that men are less likely to be diagnosed with internalizing disorders because such diagnoses do not conform to traditional gender role stereotypes (Addis, 2008). Men may also present with and express depression differently than women, leading to men being diagnosed with more conduct and externalizing disorders. In adults and adolescents, epidemiological studies purport greater increases in depression among females as a consequence of biological underpinnings (Angst & Merikangas, 1997; Blazer et al., 1994) and in particular the release of sex hormones associated with puberty in females (Angold et al., 1999); however, diathesis stress models have also been proposed,

suggesting biological vulnerabilities combined with environmental provoking experiences best address the higher prevalence rates in adolescent males (Kessler, 2003). Despite differences between these putative mechanisms, the fact remains that adolescents need effective interventions to treat their depression, especially because affective disorders such as depression are serious risk factors for suicide (Oquendo et al., 2006).

Adolescents and Depression During COVID-19

In early 2020, COVID-19 made its presence felt globally, particularly in the United States, significantly affecting the daily routines of populations at large. Although the highest levels of mental discomfort were observed among Americans aged 18–29 years (Długosz, 2021), significant increases in depression and anxiety have also been reported in adolescents (Hawes et al., 2021) along with an increase in crisis and suicidal-help seeking, especially among children and LGBTQ youth (Silliman Cohen & Bosk, 2020). Contradictory findings were reported for a sample of LatinX youth in the United States, in which internalizing and externalizing disorders significantly reduced during the pandemic (Penner et al., 2021). Despite such contradictory findings, the psychosocial effects of COVID-19 have disproportionately affected young people (Power et al., 2020). Among adolescents aged 12–17 years, a 31% increase was seen in mental health-related emergency department (ED) visits in 2021, with the mean weekly ED visit counts for suspected suicide attempts 50.6% higher among girls aged 12–17 years compared to the same period in 2019 (Yard et al., 2021). Adolescents were mandated to stay at home during the school year and were left to navigate the online educational and social worlds within the confines of their four walls. Isolated from their peer connections, they missed out on significant rites of passage and developmental milestones such as graduation ceremonies, which are critical for social, emotional, and identity development (Prinstein & Giletta, 2016).

One of the first longitudinal studies that examined depressive symptoms (pre-pandemic compared with the first 6 months after the pandemic began) revealed a median increase in depression of 28% (Barendse et al., 2021). Twelve studies were included in this sample totaling 1,339 adolescents across three countries (10 U.S., 1 Netherlands, 1 Peru). Multiracial adolescents and those teenagers under lockdown restrictions reported the most negative impacts. The latter finding highlighted the moderating effect of lockdowns on depressive symptoms for adolescents in areas with stricter lockdowns, such that “higher levels of government restrictions, and the social isolation and cancellations of in-person activities (including regular schooling) that are the result of such restrictions, might be burdensome on adolescents’ mental health” (Barendse et al., 2021, p. 29). This result not only supports research findings that showed symptoms of depression are stronger in adolescents who report feeling socially disconnected (Magson et al., 2021) and that social connection is understood as a protective factor against depression (La Greca & Harrison, 2005), it also importantly underscores the potential mediating and moderating factors for interventions that use interpersonal skills as a foundation for treatment of depression, such as Interpersonal Psychotherapy for Depressed Adolescents (IPT-A).

Suicidality

As reported by the Centers for Disease Control (Curtin & Heron, 2019), in the 16-year period from 2001–2017, the total suicide rate in the United States increased by 31% (from 10.7 to 14.0 individuals per 100,000), surpassing the rate of homicide between 2010 and 2017. This alarming statistic has been on the decline (5%) between 2018 and 2020. The U.S. Department of Health & Human Services (2014) reported 60% of people who commit suicide have had a mood disorder (e.g., major depression, bipolar disorder, dysthymia). The National Comorbidity Survey Adolescent Supplement (NCS-A) reported in 2015 that nearly 30% of adolescents with major

depressive disorder reported some form of suicidality (in that past year), with 10.8% reporting a suicide attempt (as reported by Avenevoli et al., 2015).

The rise in youth suicide is alarming, highlighted by the fact that it is the second leading cause of death in school students aged 10–14 years (Ivey-Stephenson et al., 2020). During the period of 2009–2018, suicide rates among youth aged 14–18 years increased by 61.7% (Ivey-Stephenson et al., 2020). The prevalence estimates in 2019 for school students in this age group who reported having seriously considered suicide were highest among females (Ivey-Stephenson et al., 2020), a trend seen in young adults as well, whereby suicide rates are typically two to four times higher in males than in females though attempts are three to nine times more common in females (Miranda-Mendizabal et al., 2019).

In 2020, only 58.4% of adolescents who experienced a major depressive episode received treatment (NIMH, 2022). More troublingly, of those that do seek mental health services, the literature on child and adolescent depression reports a sobering theme on the “growing uncertainty on whether intervention effects for depression are truly reliable” (Weersing et al., 2017, p. 13). Thus, the need for effective therapeutic treatments for depressed adolescents cannot be understated. Two important reasons by Mufson and Sills (2006) include:

- Reducing the destructive, concomitant problems, including high-risk behaviors (drug and alcohol abuse), teen pregnancy, school failure, and dropout.
- Reducing the frequency of completed suicide, suicide attempts, and suicidal ideation, as depression is a major risk factor for these behaviors.

Psychosocial Treatments for Adolescent Depression

There have been three “evidence base updates” of psychosocial treatments for child and adolescent depression (David-Ferdon & Kaslow, 2008; Kaslow & Thompson, 1998; Weersing et

al., 2017). Kaslow and Thompson (1998) presented the first review of evidence-based treatment (EBT) for youth depression. At that time, there was a paucity of research on adolescent depression, largely attributable to the debate within the field about depression as a diagnosis in adolescents. Fourteen studies were identified in the review. The psychotherapeutic interventions discussed included behavioral and cognitive behavioral therapy (CBT), a nonrandomized Interpersonal Psychotherapy (IPT) trial, psychodynamic therapy, and a family-based therapy. At the time Kaslow and Thompson conducted their review, empirically-based treatment outcome studies were only just being reported. Within their research findings, none of the adolescent studies met the criteria for *well-established treatments* (due to methodological limitations) and only two studies met the criteria for *probably efficacious treatments*. These studies adapted a CBT group course entitled Coping with Depression (CWD) for adolescents and tested the course on both individuals and individuals with their parents. In this study, treatment gains were maintained at a 2-year follow-up. In summation, the 1998 review also showed the treatments were not culturally sensitive because they focused predominantly on Caucasian youth. Kaslow and Thompson advocated for a two-fold matched approach in treating adolescent depression, both in terms of the interventions that would work best for specific adolescent populations, in addition to a greater understanding of the specific components within psychotherapeutic interventions that might then be tailored to these populations of youth. Kaslow and Thompson (1998) were thus advocating for research on both moderator and mediating factors.

Ten years later, in 2008, David-Ferdon and Kaslow conducted an evidence base update that included an additional 28 trials. The majority of these trials tested CBT, and some randomized trials of Interpersonal Psychotherapy for Depressed Adolescents (IPT-A) were also included. CBT was reported, as indicated by 14 valid studies, to be a *well-established*

intervention, an effective treatment for adolescents across differing demographics and comorbidities and supported by separate research teams. It also measured up as an effective treatment when compared with alternative treatments. IPT was also found to be a *well-established treatment* although only four randomized trials were conducted. These results, although limited in the volume of studies, nevertheless supported the empirical credibility of the IPT approach tailored specifically for teenagers. Three specific IPT programs were tested: IPT, IPT-A, and IPT-AST. IPT-AST is a prevention program for adolescent depression that was inspired by the positive findings from IPT-A. It stands for Interpersonal Psychotherapy Adolescent Skills Training and highlights the need to develop effective interpersonal skills that serve as protective factors for depression; both through the promotion of positive relationships and through addressing problematic relationships (Young et al., 2010). Finally, in the 2008 review, no psychosocial intervention was found to be clearly superior (David-Ferdon & Kaslow, 2008).

In the latest review by Weersing et al. (2017), the research team's inclusion criteria for evidence base updates slightly deviated from guidelines proposed by Southam-Gerow and Prinstein (2014). For a full summary of the guidelines adopted, see Weersing et al. (2017, p. 14). Weersing et al. additionally categorized the psychosocial interventions as *well-established treatment* (Level 1), *probably efficacious* (Level 2), *possibly efficacious* (Level 3), *experimental treatment* (Level 4), and *treatments of questionable efficacy* (Level 5). The psychosocial interventions were broken down by treatment type and treatment modality. Treatment types included CBT, IPT-A, and family therapy. Treatment modalities included individual, group, technology-assisted, and bibliotherapy. Findings in this most recent review supported CBT and IPT-A as *well-established treatments*, noting that a disproportionate amount of the research on

depression for adolescents had been conducted on CBT (27 trials on CBT versus six on IPT). Interestingly, IPT-A was seen to have significantly positive findings in 83% of trials ($n = 5$ of 6) versus 56% for CBT ($n = 15$ of 27). The researchers concluded their review by stating that an understanding of the specific mechanisms of change within treatment modalities might be a more useful approach to addressing depression than understanding which specific modality works best. After all, techniques between orientations are often shared (e.g., problem solving, coaching in assertiveness, and social skills as seen with IPT-A and CBT; Weersing et al., 2017).

In this review, Weersing et al. (2017), for the first time in the literature, presented potential predictive factors, moderators, and mediators for adolescent depression. The literature on mediating factors was especially sparse. Over a 30-year period in clinical trial research, only six articles were obtained fulfilling their entry criteria. All of these trials tested the impact of CBT intervention on adolescent depression. The studies were unable to define temporal sequences, used a variety of different CBT protocols, and included populations exhibiting differing levels of depression, and therefore, the conclusions drawn by the research team reflected the ongoing difficulty of deciphering mediating factors. The conclusions of the 2017 Weersing et al. evidence base update echo, in part, the theme of clinical pleas of past reviews—the need for additional research to match interventions with specific populations. The latest evidence base update proposed research to develop a greater understanding of “matching care to the clinical severity and complexity of depressed youths and addressing long-term efficacy of interventions and prevention of depression” (Weersing et al., 2017, p. 38).

Brief History of Interpersonal Psychotherapy

IPT is a time-limited psychotherapeutic intervention developed by Klerman and Weissman (1989) in the 1970s that emphasizes the key role of interpersonal relationships and

interpersonal dynamics within both the onset and maintenance of depressive symptomatology. IPT has its roots embedded within the psychodynamic psychological theories of Harry Stack Sullivan and Adolf Meyer. More recent research revealed the theoretical underpinnings and influence of John Bowlby's theory on attachment. In his work *The Interpersonal Theory of Psychiatry*, U.S. psychiatrist Harry Stack Sullivan (1953) was the first clinician to reference the term *significant other* within the psychological literature. Sullivan believed personality and psychopathology arise as a consequence of interactional as opposed to intrapsychic forces. This laid the groundwork for interpersonal psychoanalysis. Adolf Meyer theorized that mental illness could best be understood as deficits or a dysfunction in personality as opposed to pathology of the brain. His work incorporated biological, social, and psychological factors as a way of conceptualizing a patient. John Bowlby was a British psychologist who pioneered attachment theory. This well-known theory purports that early relationships with caregivers are predictive of future cognitive and emotional styles seen within interpersonal relationships, particularly intimate relationships.

Interpersonal Psychotherapy for Depressed Adolescents (IPT-A)

IPT was initially developed and manualized by numerous psychologists in the 1970s as a time-limited, brief psychotherapy for adults struggling with depression (Dimascio et al., 1978; Klerman et al., 1979; Klerman et al., 1974). IPT identifies four problem areas associated with depression: grief, interpersonal role disputes, role transitions, and interpersonal deficits. IPT was adapted for adolescents (i.e., IPT-A) by Mufson and colleagues in 1991 as a way of increasing their independence while concurrently negotiating their interdependence on others.

Laura Mufson adapted IPT-A from the developer of IPT (Gerald L. Klerman), who actually acted as a supervisor and consultant to Mufson and also child and adolescent

psychiatrist, Donna Moreau, throughout the Phase I and II studies. In Phase I, five females adolescents participated in weekly sessions of psychotherapy, during which time Mufson developed and refined the IPT intervention adapted for adolescents into a preliminary standardized manual. An example of this refinement can be seen with the addition of *single-parent families* to the existing four problem areas associated with IPT for adults (i.e., grief, role transitions, interpersonal role disputes, and interpersonal deficits). In addition, IPT-A addresses the more specific and unique interpersonal issues adolescents tend to face, such as negotiating peer friendships, peer pressure, navigating romantic/intimate relationships, parental separation and divorce, exploration of authority in relation to parents, and the initial experience of the death of a relative or friend (Jacobson et al., 2017; Moreau et al., 1991). Typically, individuals with comorbid psychotic symptoms, with active suicidality, or with primary diagnoses of manic depression, substance abuse, anxiety disorders, or conduct disorders have not been treated with IPT-A.

To decrease depressive symptoms and improve interpersonal functioning, IPT-A involves three main strategies: (a) identifying the specific problem area (the five potential problem areas include grief, interpersonal role disputes, role transitions, interpersonal deficits, and single-parent families), (b) identifying effective communication and problem-solving techniques for the problem area, and (c) practicing these skills in session and eventually using them outside of session (interpersonal experiments). IPT-A is conducted within a time-limited framework of 12–16 sessions. The therapy is broken down into three phases: the initial phase (sessions 1–4), the middle phase (sessions 5–8), and the termination phase (sessions 9–12). These phases correspond to the three main components of IPT-A: psychoeducation, affect identification and interpersonal skill building techniques, and relapse prevention.

In the initial phase, the therapist undertakes numerous tasks, some of which include determining the adolescent's suitability for IPT-A, identifying the symptoms of depression and providing psychoeducation on depression being a limited "sick role," conducting an interpersonal inventory, and collaborating with the client to identify the major problem areas. The focus in the middle phase of treatment is on addressing the problem area identified in the initial phase, clarifying issues, and generating and applying strategies to resolve the problem. During the termination phase, the therapist reviews the progress made by the client and emphasizes the application of these skills within other interpersonal contexts. In addition, space is created to process any feelings that may arise as the therapy concludes.

Individual IPT-A has met the criteria for a *well-established treatment* whereas the group format of IPT-A (IPT-AG) has been categorized as *probably efficacious*. Within the adolescent depression literature as reported by Weersing et al. (2017), there have been six trials testing the effectiveness of IPT in group and in individual formats (Mufson, Dorta, Wickramaratne, et al., 2004; Mufson et al., 1999; Rosselló & Bernal, 1999; Rosselló et al., 2012; Young et al., 2006; Young et al., 2010). All trials were found to be effective with the exception of one null finding. This trial compared individual IPT to IPT group format (IPT-AG), and also to individual and group CBT (Rosselló et al., 2012). No significant effects were found between these groups, which may actually have emphasized the effectiveness of the IPT approach as CBT has been shown to be a *well-established treatment*. In 2018, Mychailyszyn and Elson conducted the first comprehensive review of IPT for depressed adolescents. In their meta-analysis, they concluded from the 10 studies included that IPT-A was "significantly effective at reducing depressive symptoms in adolescents and significantly more effective than control or treatment-as-usual groups in treating depression in adolescents" (p. 123).

In addition to individual treatment of Interpersonal Psychotherapy for Depressed Adolescents (IPT-A), treatment with groups (IPT-AG; Mufson, Gallagher, Dorta, & Young, 2004), and treatment for preventative measures (IPT-AST; Kerner & Young, 2016), interpersonal psychotherapy has also been adapted for depressed youth who display a high risk of suicide (IPT-IN; Tang et al., 2009) and for depressed pregnant adolescents (IPT-P; Miller et al., 2008), and a family-based intervention for preadolescents aged 9–12 (FB-IPT) was devised by Dietz et al. (2008). Interestingly, some researchers have examined the adaptation of IPT in group formats (IPT-G) for adolescent survivors of war in Northern Uganda with promising results for adolescent females (Bolton et al., 2007). In Australia, O'Shea et al. (2015) compared IPT-AG to IPT-A, and although there were no significant differences between the formats, significant improvements were noted in depression, anxiety, and intrapersonal and internalizing problems. At 12-month follow-up, a significant proportion of individuals within both treatment conditions (i.e., IPT-A & IPT-AG) no longer met the full criteria for major depressive disorder (O'Shea et al., 2015). A study in 2016 orchestrated by the same research team in Australia highlighted improvements in social skills and social functioning, as well as enhanced parent–child interpersonal relationship as a function of IPT-A and its associated change in depression (Spence et al., 2016).

Finally, IPT-A has been developed to be administered outside of the lab in community settings such as school-based health clinics. The success of this approach reflects the practicality of such an intervention—that it may be taught to school-based clinicians—and it was reported to result in significantly better social functioning and greater reduction in depressive symptoms across comorbid anxiety, attention deficit hyperactivity disorder (ADHD), and oppositional defiant disorder (Mufson, Dorta, Wickramaratne, et al., 2004; Mufson & Sills, 2006; Young et

al., 2006). An intervention such as this allows youth greater access to effective services for depression, and may also provide economic advantages.

In examining effective therapeutic treatments, both CBT and IPT-A have stood out, although the number of IPT-A studies conducted is significantly lower than the number conducted on CBT. Given the promising results of IPT-A, this systematic review was designed to answer the following questions:

RQ1: What is the effectiveness of IPT-A (and adaptations) specifically in the reduction of depressive symptomatology as reported by established measures of depression across quantitative randomized control trials?

RQ2: What are the concomitant findings associated with the implementation of IPT-A? For example, are there low attrition rates? Is implementation feasible and acceptable to clinicians, parents, and youth?

RQ3: What are the potential moderating and mediating variables that may account for this effectiveness?

The answers to these questions will help clinicians to be better informed when providing interventions to specific populations, gain greater insight regarding attenuation and intensification effects, and hopefully provide a basis of information for future public policy (i.e., the dissemination of mental health services for depressed adolescents, funding, and future research). In addition, understanding the specific mechanisms of change within treatment modalities might be a more useful approach to addressing depression than understanding which specific modalities work best (Weersing et al., 2017).

Potential Contributions

There is now over 25 years of research on IPT-A and its adaptations. This systematic review (SR) may be a great resource for aspiring clinicians who are interested in gaining a greater appreciation and understanding of the individual IPT-A approach, adapted versions of IPT used in developing countries with diverse population characteristics, and the overall effectiveness of this psychotherapeutic intervention. Additionally, gaining a clearer picture of the underlying mechanisms (mediators) related to the effectiveness of IPT-A (e.g., family interpersonal functioning) and identifying the specific psychological constructs (moderators) that may be responsible for strengthening or weakening the intervention's effects (e.g., attachment style, mother child conflict) would provide an opportunity for practitioners to focus their therapeutic efforts on these specific areas to enhance treatment. It could also potentially help in identifying specific populations who would most benefit from such interventions. Researchers might be interested in using this review as a resource to explore the history and diversity of IPT studies and research designs employed around the globe, which hopefully might inspire the next great study.

Chapter 2: Methodology

Systematic Review Approach

This study involved the use of an SR methodology, specifically a narrative synthesis of quantitative studies (without meta-analysis). This approach was chosen due to there being a lack of data to calculate standardized effect sizes as standardized effect sizes were not available in six out of nine studies. Additionally, high levels of heterogeneity, in particular, methodological and clinical diversity within the included studies, contraindicated a meta-analysis. These are both sound reasons offered by researchers that preclude meta-analysis (Campbell et al., 2019; Thomson & Campbell, 2020). In addition, in SRs of social science research, it is recommended that a narrative synthesis of the findings be completed in addition to or in the absence of a meta-analysis (Petticrew & Roberts, 2006).

Research Variables

The primary construct or research variables under investigation in this SR were *interpersonal psychotherapy, group interpersonal psychotherapy, adolescents, depression, effectiveness, moderating factors, meditating factors, and suicide*. A list of variations of each of these primary research variables can be found in Appendix A.

Source Eligibility

This researcher searched for studies using the research variables above across three electronic databases: EBSCOhost (PsycINFO: Academic Search Complete), PubMed, and Scopus. Studies were selected if they were from scholarly, peer-reviewed/scholarly reviewed journals and published in English between 1990 and 2021. Journal review articles, meta-analyses, SRs, books, chapters, and dissertations were all excluded from the primary searches although articles scanned and identified from SRs, meta-analyses and review articles could have

been used if those studies were not discovered from the primary search conducted (and so long as they met the inclusion/exclusion criteria). It should be noted that to the author's knowledge, the Scopus database did not allow for "peer-review" only searches, and therefore, where necessary, any such studies were then screened out in the screening and selection of studies that followed after export to Excel.

Eligibility Criteria

Participants

Participants in the studies needed to be between the ages of 12 and 20 years. Participants were not excluded based on any other personal characteristics, such as race, ethnicity, socioeconomic status (SES), religion, sexual orientation, or gender. Studies were required to have an IPT intervention with individuals who were struggling with depressive symptoms across a range of diagnoses: major depressive disorder, persistent depressive disorder, dysthymic disorder, other specified depressive disorder, and unspecified depressive disorder. In addition, individuals with depression as a part of a comorbidity diagnosis/dual diagnosis were eligible; however, individuals with a substance/medication-induced depressive disorder were excluded. As highlighted by the California Evidence-Based Clearinghouse for Child Welfare (2021), IPT-A is not indicated for adolescents who are acutely suicidal or homicidal, psychotic, bipolar, have intellectual disability, or for adolescents who are actively abusing substances. This being said, this SR did include studies that explored adaptations of IPT-A for parasuicide behaviors (IPT-A-IN) and adaptations of IPT-AG such as IPT-G for war-affected youth in Northern Uganda. Cross cultural adaptations of IPT-G have important implications for the feasibility of enhancing treatments in less-developed countries. Last, bipolar disorder did not meet the criteria for the

construct of depression that was being investigated, as manic episodes may have acted as a confounding variable.

Settings

Studies eligible for inclusion included all geographic locations, both in and out of the laboratory (e.g., schools, community settings, mental health settings), as well as international studies (i.e., outside of the United States). This SR did not exclude any studies based upon specific research setting or location criteria.

Study Designs

To be eligible for inclusion, studies needed to be quantitative in design. Due to the small number of randomized control trials (RCTs) located via initial searches of the literature, the inclusion criteria regarding study designs were broadened. Thus, this review included RCTs, randomized trials (RTs), pilot studies, SMART designs, follow-up studies, and single group pretest–posttest designs. In relation to the identification of RCTs, the author of this SR appraised a study as being an RCT provided there was a control group in the study unrelated to the intervention being investigated (i.e., a control group that was not an adaptation of IPT-A). For example, a wait list (WL) control, treatment as usual (TAU), or a separate intervention such as CBT were all deemed suitable control groups to thus label a study as being an RCT. Where a study’s control group was an adapted form of IPT-A (e.g., IPT-A vs. IPT-AP; or IPT-A vs. IPT-AG), these studies, despite their underlying rigor and randomization, were regarded as RTs for this review.

This SR restricted the findings of the quantitative data to RCTs (as operationalized above) so that the “gold standard” studies (i.e., RCTs) were being compared among one another as opposed to mixing the results from quantitative studies of effectiveness without controls or

with IPT controls. These RCT studies all explored the efficacy of IPT-A (and adaptations) and therefore were best suited to answer RQ1 addressing the quantitative effectiveness related to controls, and also RQ2 on secondary outcomes. The remaining quantitative studies exploring the effectiveness of IPT-A were included to address RQ2 on secondary outcomes as well; where *p*-values were reported for these studies, the author made note of this, yet the synthesis was more focused on these secondary outcomes. Finally, studies were screened that addressed the question of moderators, mediators, and variables of interest addressing reasons for the effectiveness of IPT-A, and these were included to answer RQ3.

IPT Adaptations

There are a whole host of IPT-A adaptations. This study was designed to include peer-reviewed studies of IPT-A (Interpersonal Psychotherapy for Depressed Adolescents) and a selected assortment of adapted IPT-A interventions for adolescents used within quantitative studies. Adaptations of IPT-A that were not seen as having a primary focus for depressed adolescents were not included in this review. For example, a depression preventative adaptation called IPT-AST focused on adolescent skills training (Kerner & Young, 2016) and a version of IPT for pregnant adolescents (IPT-PA) were both excluded. A family-based version of IPT (FB-IPT) for *preadolescents* was not included due to the sample population toward which it was targeted. Adaptations that were eligible for inclusion included a brief version of IPT-A (BIPT-A); an adapted version of IPT-A for adolescents with parasuicide behaviors, a history of suicide attempts, or self-injurious behaviors (IPT-A-IN); enhanced parental involvement (IPT-AP); a stepped care model of IPT-A (SCRIPT-A); and group Interpersonal Psychotherapy for Depressed Adolescents (IPT-AG). Adapted group versions of IPT for adolescents were all also made eligible for inclusion due to the small number of group studies that were specifically drawn from

IPT-A. A preliminary review of these group models, especially from developing countries (IPT-G), showed that at their core the principles of IPT were used and the author and chair decided widening the search to include cultural adaptations could provide for some interesting results.

Depression Measures

Although a variety of measures were given to the participants within each of these studies, only psychological measures that related to depression scores pre- and postintervention (or follow-up) were included in the analysis for RQ1. A representation of the depression measures and all measures administered to participants in these studies can be found in Appendix B (Figure B1).

Search Process

The main search for this review was conducted across EBSCOhost (APA PsycInfo), PubMed, and Scopus in 2021. Searches within the Scopus database were limited to the following categories: psychology, neuroscience, social sciences, multidisciplinary, arts & humanities, pharmacology, toxicology and pharmaceuticals, health professions, and decision sciences (please see Appendix C and D for a breakdown of the Search Documentation and Screening Process, and Screening and Selection Record).

A preliminary set of keywords, descriptors, and search terms was determined based on an initial review of the literature. Key search terms used (see Appendix A) were *Interpersonal Psychotherapy*, *adolescents*, *depression*, *effectiveness*, *moderating factors*, *mediating factors*, *suicide*, and *group interpersonal therapy*. Variants of these words, blocks of words, and word-stems were included in the searches for every keyword. See Appendix E (Search Syntax), and Appendix F (Comprehensive Search Plan). Other words used with *interpersonal psychotherapy* included *IPT-A*, *IPT*, and *interpersonal therapy*. For *adolescents*, the words used included *youth*,

teen, teens, teenagers, and young adults. For *depression*, additional search terms used included *depressed, depressive disorder, depressive symptoms, major depressive disorder, major depression, dysthymic disorder, and depression disorder not otherwise specified.* For the key term *effectiveness*, the words *efficacy, effective, success, and outcome* were included. For *suicide*, additional terms included *SI, suicidal risk, suicidal ideation, suicide attempt, and history of suicide attempt.* Finally, for the key term *group interpersonal psychotherapy*, search terms included *group therapy, IPT-AG, group counseling, and group intervention.* The terms *moderator/s* and *mediator/s* were included as further terms for the key terms *mediating factors* and *moderating factors.*

Database Management, Screening, and Selection of Studies

A comprehensive search was initially conducted across all search engines/databases. Duplicates were automatically removed by each of the search engine databases as the search strategy was implemented. The results for each of the Search IDs (across databases) were recorded separately in Microsoft Excel 2019 (see Appendix C). Once the comprehensive search plan was implemented in full within one search engine, the results were then exported to Microsoft Excel. Note, however, that duplicates still had to be removed once the results from all three databases were exported and housed together within the one spreadsheet in Microsoft Excel. This was called Master Screening and Selection Combined. Duplicates were then removed by the author and research assistants.

Screenshots of the Screening and Selection Record spreadsheet can be found in Appendix D. The screening and selection comprised three phases (Phase 1, Phase 2, and Phase 3). Phase 1 entailed a thorough screening of the titles, keywords, and abstracts of the studies to deem whether or not the inclusion and exclusion criteria were met. If a study did not meet the inclusion

or exclusion criteria, an “N” for no was recorded. Additionally, the reason for exclusion was notated in the spreadsheet by marking an “X” in the column that correlated with the specific reason. The reasons for exclusion used in this SR included *duplicate, qualitative, book/conference, not IPT-A (or variations accepted)/other psychotherapy, literature review/meta-analysis/systematic review/survey, and not relevant.*

After careful review of all of the studies in the master database, all studies that appeared to have met the criteria for inclusion in the SR were exported to a separate spreadsheet after which Phase 2 began. This entailed a full-text review of the studies that appeared to meet the inclusion/exclusion criteria. Studies were eliminated that did not meet the inclusion criteria or if further duplicates were found. Finally, in Phase 3, a secondary confirmation was decided upon by the author. If discrepancies arose between the author and research assistants, the author had planned to inquire with his chair to resolve any disputes. No such discrepancies took place. A spot check by a peer was also undertaken with a sample of papers to ensure the inclusion/exclusion criteria had been met.

Data Collection and Extraction

A Microsoft Word document was used to collect data extracted from each of the selected studies (see Appendix G). The form chosen was developed by Cochrane and modified from Effective Practice and Organization of Care (EPOC). A specific description of this data collection and extraction form now follows.

The Data Extraction Form was used to record all of the relevant data. Preliminary information on the Data Extraction Form (Appendix G) included a Document ID, which was created using the last name of the primary researcher and the publication year of the article. The full document title (article title) was recorded along with the research variables under

investigation. The Data Extraction Form was broken down into the following headings: General Information, Design Characteristics and Methodological Features, Assessment of Research Variables, Study Participant Characteristics and Recruitment, Setting Characteristics, Analyses Conducted, Results, and finally Conclusions and Follow-Up. An overview of each section is provided below. See Appendix G for a sample Data Extraction Form.

General Information included items such as the source/publication type (e.g., journal), source name (title of journal), publication status, document language, as well as notes. Design Characteristics and Methodological Features included the aim of the specific study and general method (e.g., quantitative, qualitative, mixed, etc.). Assessment of Research Variables listed the variables under investigation in the particular study. Study Participant Characteristics and Recruitment listed the population of interest, recruitment methods, sample size, age, gender, and race/ethnicity. Setting Characteristics revealed the study location and data collection settings. Analyses Conducted made known the descriptive statistic used and any inferential statistics. A list of the key results was recorded within the Results section, and the Conclusions and Follow-Up section included items such as the key conclusions made by the study's author/s, recommendations for future research as postulated by the author/s, references to other relevant studies, a sub-section highlighting whether the study directly addressed the review question, salient study limitations (to inform quality appraisal), and general take-aways.

Quality Appraisal and Risk of Bias

Quality appraisal of all studies that met the eligibility criteria of this review was done using the Individual Quality Appraisal Form for Systematic Reviews. See Appendix H for a sample copy.

The 11 sections of the quality appraisal form included Methodology, Specific Design/Inquiry Approach, Quality of Research Design or Methodological Approach, Clarity and Specificity of Research Aims/Objectives/Questions/Hypotheses, Sample Selection and Characteristics, Data Collection Tools (Scales, Observation, Interviews, etc.), Data Collection Processes, Analysis and Presentation of Data, Discussion of Study Limitations, and Consideration of Culture and Diversity. Please see Appendix H for a complete breakdown of the content of each of these sections. A 12th section requires the scorer to give an “Overall Score” for the study under examination. If the study receives “mostly 1s” it is scored *weak*, “mostly 2s” = good/adequate, “mostly 3s” = strong, and finally, if a study receives all 3s by the scorer it is marked as “Exemplary.” The research team decided to equate a final score for each of the studies from 0–10. Exemplary received a 10, an excellent study 9, strong 8, good 7, adequate 6, and finally, if a study was regarded as weak, it received a score of 5 or below.

Quality Appraisal of Studies

Most of the studies included in this review were rated highly in terms of quality appraisal (see Tables A2, A4, & A5). A random number generator was used to select three studies for the author’s chair to rate and then compare with the scores previously given by the research assistants and the overall score given by the author. Random samples of studies were given to the chair to ensure interrater reliability, which was 100% for the total quality appraisal scores.

Data Management, Synthesis, and Analysis Plan

The data from the Cochrane Data Extraction Forms were then input into an Excel spreadsheet (Master Data Extraction) where they could be analyzed further. Included data obtained in the data extraction process as seen in Excel were Year/Date, Author/s, Title, Subjects/Author Keywords, Abstract, Type of IPT-A, Quality Appraisal Score, Design/Type of Study, Country of

Study, Study Location, N, Mean Age, Depression Diagnosis, Comorbidity, Demographic/Summary of Youth, Gender Breakdown (Male/Female), Ethnicity, SES, Family (Nuclear/Single-Parent), Previous Mental Health Treatment, Attachment Style, Medication, Other Variables of Interest (e.g., Social Support), Global Functioning, Interpersonal Effectiveness/Social Functioning, Mediation Analysis Used/Model, Mediators Identified (Variables Listed), Moderation Analysis Used/Model, Moderators Identified (Variables Listed), Potential Moderator Comments, Key Results, Measures Used, and Interesting Note/Finding. Extraction form data were initially kept in separate Microsoft Word documents housed on Google Drive.

Separate tabs in Excel were created to nest all of the information across Study Characteristics, Participant Characteristics, and Results from Depression Scores Across RQ1. Within the Study Characteristics sheet, studies were coded with a number 1, 2, or 3. These numbers correlated with the three research questions in the review and were coded based upon the best judgment of the author and research assistants. The chair was also consulted. Studies were carefully read and where titles included the term mediator or moderator, these were coded with the number 3. If ambiguity arose regarding how to code a certain study, a further inspection of the study design ensued, and in many of these cases it was determined that the study was an additional analysis from a RCT already coded as RQ1. Upon closer inspection of the language of the study's title (e.g., relationship between, effect on, etc.) and a further examination of the intent of the study, many of these studies were then coded as RQ3 as they appeared to be potential moderators or mediators related to effectiveness of IPT-A and its adaptations.

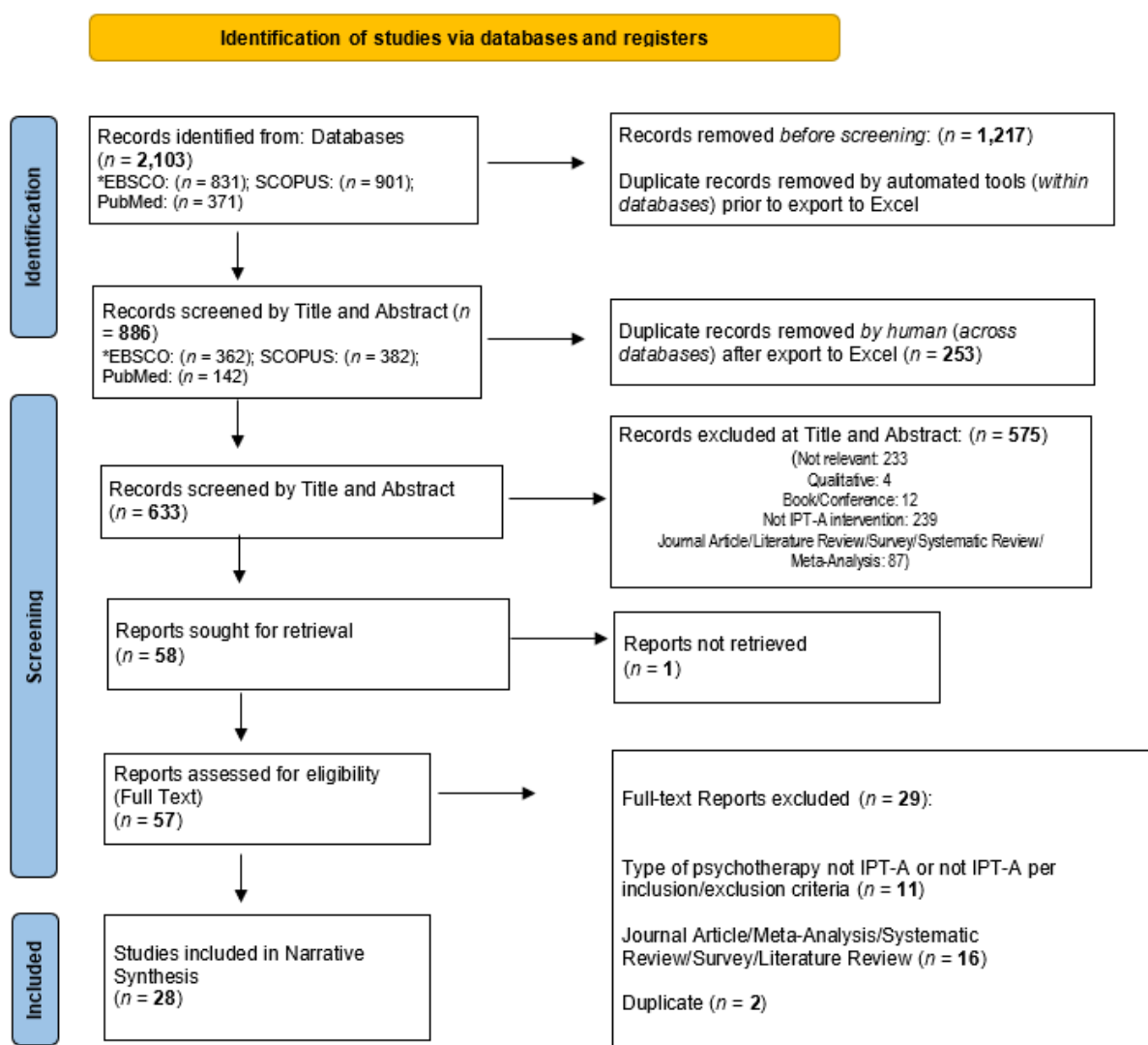
Content and thematic analysis of the reported effectiveness of IPT-A and its potential mediating and moderating factors was conducted. Data were analyzed using a narrative synthesis

as guided by Popay et al. (2006). A general framework for the narrative synthesis process is to develop a theory of how the intervention works, why, and for whom; develop a preliminary synthesis of findings of included studies; explore relationships in the data; and finally, to assess the robustness of the synthesis (Popay et al., 2006).

Chapter 3: Results

Study Selection

A total of 2,103 articles were found via the database searches (i.e., EBSCOhost/PsycInfo, Scopus, PubMed). Within database duplicates ($n = 1,217$) were automatically removed electronically prior to export, at which time further duplicates were removed across databases by the author and research assistants ($n = 253$). Hence, 633 articles published from 1994 to 2021 met the initial screening criteria for this SR. A large number of records (91%) were removed at the abstract and title screening stage, resulting in 58 records being sought for retrieval. Reasons for exclusion at the title and abstract screening stage are highlighted within the PRISMA Flow Diagram (see Figure 1). Of the remaining 58 records, one report, that by Tang and Huang (2013), could not be retrieved by the author or library staff, so 57 studies were retained for further consideration. Twenty-seven were excluded for not meeting the inclusion/exclusion criteria after reading the full texts, and a further two duplicates were found. Therefore, a total of 28 studies were included in this SR.

Figure 1*PRISMA Flow Diagram***Characteristics of Included Studies***Participants and Study Characteristics*

Nineteen studies were conducted in the United States (68%); two each in Northern Uganda (7%), Puerto Rico (7%), and Australia (7%); and one each in Canada (3.6%), Taiwan (3.6%), and South Africa (3.6%). Altogether, the 28 studies included 1,533 participants with age

ranges from 12–19 years and a mean age of 14 years. Sixty-five percent of the entire sample identified as female. The mean sample size across studies was 94; however, when removing the two largest participant samples (i.e., Betancourt et al., 2012; Thurman et al., 2017), the mean sample size was reduced to 51. These two samples accounted for 52% of the participants across all of the included studies. Due to the extreme variability in sample sizes ranging from four to 489 and the presence of a right skewed distribution, a median sample size was calculated, and this was 44.

All of the studies reported a majority of female participants with one exception (i.e., Thurman et al., 2017); the percentage of females in this IPT-G study was 50%. A further examination of the included studies in this SR revealed a mean percentage of female participants of 65% compared to a median of 80%. The participant samples in three studies comprised solely females (Mufson et al., 1999 [Phase 1]; Mufson & Fairbanks, 1996; Toth et al., 2020), and the vast majority of studies (65%) had a proportion of females totaling at least 70% of the sample.

A range of ethnicities was seen across the studies: Aboriginal, Acholi, African American, American/Native Indian/Alaskan Native, Asian American, Australian, Caucasian, LatinX/Hispanic, Puerto Rican, sub-Saharan African, and Taiwanese, in conjunction with participants identifying as bi-racial. This was to be expected given the varied geographical locations of the included studies; however, the majority of the studies had a LatinX/Hispanic population with small to medium sample sizes. Seven of the 11 studies in the United States had samples comprising at least 70% LatinX participants, and one study included 100% LatinX/Hispanic (i.e., Mufson et al., 2015). A subsequent study by Mufson et al. (2018) investigating a stepped-care model of IPT-A had a sample that comprised 96% LatinX participants. Exceptions included Toth et al. (2020) where 65% of participants were African

American and two studies (Gunlicks-Stoessel & Mufson, 2016; Gunlicks-Stoessel et al., 2016) where 84.4% and 80% of the samples were Caucasian. In Australia, O'Shea et al. (2015) conducted a randomized trial where Caucasian youth were predominant, making up 97% of the sample. Finally, and of note, one study did not report participants' ethnicity (i.e., Santor & Kusumakar, 2001).

IPT-A Interventions

Of the 28 studies included in this SR (see Table B1), 22 examined individual IPT-A and variations of individual IPT-A and six focused on a group format of IPT (i.e., Betancourt et al., 2012; Bolton et al., 2007; O'Shea et al., 2015; Rosselló et al., 2012; Spence et al., 2016; Thurman et al., 2017). Among the individual IPT-A formats, six studies explored variations of IPT-A inclusive of one RCT that used an ecologically adapted form of the intervention for Puerto Rican adolescents (i.e., Rosselló & Bernal, 1999). The five studies exploring variations of IPT-A included one RCT from Taiwan that examined a more intensive Interpersonal Psychotherapy for Depressed Adolescents with suicidal ideation (IPT-A-IN; Tang et al., 2009) and four studies from New York City spanning the period of 2013–2018, which included a pilot open clinical trial pretest–posttest of brief Interpersonal Psychotherapy for Depressed Adolescents in health clinics (BIPT-A; Mufson et al., 2015), one pilot study in pediatric clinics exploring the effectiveness of stepped-care Interpersonal Psychotherapy for Depressed Adolescents (SCRIPT-A; Mufson et al., 2018), and two studies comparing IPT-A to Interpersonal Psychotherapy for Depressed Adolescents with greater structured parent involvement (IPT-AP; Gunlicks-Stoessel & Mufson, 2016; Gunlicks-Stoessel et al., 2013).

A closer examination of the group interventions revealed three RCTs (i.e., Bolton et al., 2007; Rosselló et al., 2012; Thurman et al., 2017) and one RT from Australia comparing IPT-A

to group IPT-A (i.e., O'Shea et al., 2015). The three RCTs were from Northern Uganda, Puerto Rico, and South Africa. The RCT from Northern Uganda explored the effectiveness of group adaptation for adolescent survivors of war (Bolton et al., 2007). A subsequent moderator analysis was conducted by Betancourt et al. (2012) examining the potential associations between IPT-G treatment and war-affected youth with depression. The RCT study from Puerto Rico used a culturally sensitive and ecological adaptation of IPT-A that was then subsequently used to compare and contrast the efficacy of this adaptation to individual and group formats versus CBT individual and group format (Rosselló et al., 2012). The final RCT group study came from South Africa (Thurman et al., 2017). In this study, the researchers explored the efficacy and impact of group interpersonal psychotherapy for orphaned and vulnerable adolescents experiencing depression (IPT-G). The additional analysis of a RT hailed from Australia (Spence et al., 2016) and examined the moderating role of attachment style.

Controls and Measures of Depression in Randomized Control Trials (RCTs)

The RCTs in this systematic review compared individual or group IPT to a variety of clinical controls: WL, creative play (CP), CBT (individual and group controls), treatment as usual (TAU) consisting of supportive counseling/psychoeducation, enhanced treatment as usual (E-TAU), enhanced community standard (ECS), and clinical monitoring. Table B1 offers a complete breakdown of the RCTs in this SR and includes type of IPT-A intervention; depression measures used; raw scores for IPT interventions at baseline, posttest, and follow-up (*p*-values and effect sizes listed when given by the authors); and raw scores for control groups. All of the measures used by these RCTs were reported as valid and reliable (see Table 1). The most frequently used depression measure across RCT studies was the Beck Depression Inventory (BDI, BDI-II, and BDI-Y; *n* = 4), followed by the Hamilton Rating Scale for Depression

(HRSD; $n = 2$) and Children's Depression Inventory (CDI; $n = 2$). A complete list of measures used across all of the RCTs is provided in Appendix B (Figure B1). In addition, Appendix I provides a detailed description of each of the depression measures used within the RCTs.

Table 1

Frequency of Measures of Depression in Randomized Control Trials

Measure of depression	Frequency	Authors
Beck Depression Inventory (BDI, BDI-II, & BDI-Y)	4	Mufson et al. (1999); Mufson, Dorta, Wickramaratne, et al. (2004); Tang et al. (2009); Toth et al. (2020)
Hamilton Rating Scale for Depression (HAM-D, HRSD)	2	Mufson et al. (1999); Mufson, Dorta, Wickramaratne, et al. (2004)
Children's Depression Inventory (CDI)	2	Rosselló and Bernal (1999); Rosselló et al. (2012)
Children Depression Rating Scale - Revised (CDRS-R)	1	Mufson et al. (2018)
Center for Epidemiologic Studies Depression Scale for Children (CES-DC)	1	Thurman et al. (2017)
Patient Health Questionnaire (PHQ-9)	1	Mufson et al. (2018)
Acholi Psychosocial Assessment (APAI)	1	Bolton et al. (2007)

RQ1: Quantitative Outcomes From RCTs in Reducing Symptoms of Depression

Nine studies best addressed RQ1 in terms of the effectiveness of IPT-A (Bolton et al., 2007; Mufson, Dorta, Wickramaratne et al., 2004; Mufson et al., 2018; Mufson et al., 1999; Rosselló & Bernal, 1999; Rosselló et al., 2012; Tang et al., 2009; Thurman et al., 2017). An additional study (Toth et al., 2020) was also included here. Although this study's focus was on moderating variables, it did provide pretest and posttest scores on a validated measure of depression and therefore was included in RQ1, but not RQ2. This study's results are elaborated upon in RQ3 on moderating and mediating variables.

Overview of Significant Results From RCTs

From the nine selected RCTs highlighted above, the mean p -value associated with the effectiveness of IPT (and its adaptations) on decreasing symptoms of depression from pre- to posttest (versus controls) was estimated as $p < .083$, suggesting the effect of the intervention was approaching statistical significance ($p = .05$). The range of p -values in the sample of studies was from $p < .001$ (Tang et al., 2009) to $p < .4$ (Mufson et al., 2018), with one study on IPT-G reporting a nonsignificant p -value (Thurman et al., 2017). Interestingly, the other IPT-G intervention, from Northern Uganda (Bolton et al., 2007), revealed a significant effect for the intent to treat sample IPT versus WL control group ($p < .02$), yet the significance was restricted to females in the sample. An additional nonsignificant finding arose when comparing IPT-A (individual and group formats) to CBT in Puerto Rico (Rosselló & Bernal, 1999; Rosselló et al., 2012); however, IPT-A was found to be more effective compared to a WL control group ($p < .002$; Rosselló & Bernal, 1999) and significant reductions in depressive symptoms were reported in both group and individual IPT-A (Rosselló et al., 2012). Only three of the eight studies reviewed provided effect sizes for IPT versus control groups (Mufson, Dorta, Wickramaratne, et al., 2004; Mufson et al., 2018; Rosselló & Bernal, 1999) and they ranged from .35 to .73. The control groups in these studies were WL, cognitive behavioral therapy (CBT), treatment as usual (TAU), and enhanced TAU, respectively.

Due to the small number of RCTs ($n = 9$) and in an effort to provide context for the outcomes of effectiveness, these studies' findings are presented by outlining key components of each study's methodology followed by associated quantitative results. The studies for RQ1 are ordered here by combination of frequency of author/s, stand-out findings, and group IPT-A intervention/s. Table 2 shows an overview of these studies.

Table 2*P-Values and Effect Sizes Across RCTs*

Research team	P-value	Effect size	Strength of effect	IPT type
Tang et al. (2009)	<.001	<i>Not provided</i>	<i>Not provided</i>	IPTA-IN
Rosselló & Bernal (1999)	<.002	0.73	<i>Medium to large</i>	IPT-A (adapted)
Mufson et al. (1999)	0.02	<i>Not provided</i>	<i>Not provided</i>	IPT-A
Bolton et al. (2007)	0.02	<i>Not provided</i>	<i>Not provided</i>	IPT (group)
Mufson, Dorta, Wickramaratne, et al. (2004)	0.04	0.5	<i>Medium</i>	IPT-A
Mufson et al. (1999)	0.05	<i>Not provided</i>	<i>Not provided</i>	IPT-A
Toth et al. (2020)	0.076	<i>Not provided (at least .80)</i>	<i>Large</i>	IPT-A
Mufson Dorta, Wickramaratne, et al. (2004)	0.14	0.37	<i>Small to medium</i>	IPT-A
Mufson et al. (2018)	0.4	0.35	<i>Small to medium</i>	SCRIPT-A (BIPT-A)
Thurman et al. (2017)	Not significant	<i>Not provided</i>	<i>Not provided</i>	IPT (group)
Rosselló et al. (2012)	[0.016] in favor of CBT	-	-	IPT (group)

The founder of IPT-A, Dr. Laura Mufson, was the head researcher in three of the nine RCTs that best addressed RQ1 (Mufson, Dorta, Wickramaratne, et al., 2004; Mufson et al., 2018; Mufson et al., 1999). As these made up one third of the RCTs ($n = 3$ of 9) for RQ1, they are reported first. Additionally, subsets of the data collected by Mufson, Dorta, Wickramaratne, et al. (2004) were analyzed and presented in a further six studies (these studies' results are reported in RQ3). Following the three Mufson et al. RCTs, the most significant findings on the effectiveness of IPT across the nine RCTs are then reported (Rosselló & Bernal, 1999; Tang et al., 2009).

Group formats of IPT are then reported together (Bolton et al., 2007; Rosselló et al., 2012; Thurman et al., 2017), and finally, the last RCT (Toth et al., 2020) is reported separately.

RCTs of IPT-A by Mufson, Dorta, Wickramaratne, et al., 2004; Mufson et al., 2018; Mufson et al., 1999

Mufson et al. (1999). Three of the nine RCTs listed in RQ1 were conducted by the founder of IPT-A, Dr. Laura Mufson, and fellow researchers (Mufson, Dorta, Wickramaratne, et al., 2004; Mufson et al., 2018; Mufson et al., 1999). The first RCT (Mufson et al., 1999) compared IPT-A to clinical monitoring (CM) in a largely Latina sample of older adolescents ($N = 48$; Mean age = 16; 73% female; 71% Hispanic) who met the *DSM-III* criteria for major depressive disorder (MDD). Eighty-eight percent of the sample also met the criteria for any type of anxiety disorder. CM involved supportive listening to patients who were seen monthly for 30-minute sessions with an option of twice per month, compared to weekly sessions of IPT-A for 12 weeks. The same therapists were used for both treatment conditions, with measures being conducted by a child psychiatrist (blinded to treatment condition) every 2 weeks. Sixty-nine percent of the participants came from a single-parent family. Significant p -values were reported when comparing IPT-A pretest–posttest scores to CM across both depression measures (HRSD: $p < .02$; BDI: $p < .05$). Seventy-five percent of patients in the IPT-A intent to treat sample met the criteria for full recovery of a depressive episode as measured by the HRSD compared to 46% in the CM group (HRSD: $p = .04$). Compared to the control group (CM), an additional 25% of the IPT-A group met full recovery for depression.

Mufson, Dorta, Wickramaratne, et al. (2004). Mufson Dorta, Wickramaratne, et al. (2004) reported the results of a 16-week randomized clinical trial in five urban school-based mental health clinics in New York City comparing IPT-A to TAU, which was best described as

supportive counseling. The researchers attempted to evaluate whether school-based clinicians could be trained to implement evidence-based psychotherapies, specifically, the growing body of research for IPT-A at that time. A host of measures were administered in this study and subsequently analyzed by a variety of research teams (all inclusive of Mufson) in a series of studies released between 2006–2017. All of these studies ($n = 6$) are included in this SR within RQ3 on mediating and moderating variables. One study (Reyes-Portillo et al., 2017) restricted the analysis to a LatinX subset within the sample ($n = 50$).

In the original 2004 RCT (Mufson, Dorta, Wickramaratne, et al., 2004), the sample was predominantly female (84%), Hispanic (71%), and low SES. Seventy-seven percent of the individuals came from single-parent households and the majority of participants met the *DSM-IV* criteria for MDD. Half of the clinicians were trained in IPT-A. The training was abbreviated, which included reading of the IPT-A manual, brief didactic training, and weekly supervision (by either Mufson or Dorta). A psychologist or social worker who was blinded to treatment condition administered measures of depression (i.e., BDI and HRSD) every 2 weeks. A moderate effect was reported at week 12 when comparing IPT-A to TAU ($d = 0.37$; $p = .14$). At termination, 75% of participants in the IPT-A intervention compared to 52% in TAU had scores on the BDI, signifying depression recovery. The HAMD revealed more significant outcomes at week 12 when comparing IPT-A to TAU ($d = .50$; $p = .04$). Repeated measures analysis for the HAMD revealed a significant interaction with time compared to TAU where a faster rate of improvement was seen ($p < .001$). Additionally, when comparing older teenagers (14–15 years) between conditions, a significant finding emerged for HAMD scores ($p = .006$). At termination, recovery scores on the HAMD were met by 50% of participants in the IPT-A intervention compared to

34% in TAU. A score on the HAMD was also attained by telephone at week 16 (no BDI), which indicated maintenance of decreased depressive symptoms compared to TAU ($d = .51$; $p = .04$).

Mufson et al. (2018). Mufson et al. (2018) examined the feasibility and acceptability of a variation of IPT-A entitled Stepped Care Interpersonal Psychotherapy Treatment for Depressed Adolescents (SCRIPT-A) using the previously tested brief Interpersonal Psychotherapy for Depressed Adolescents (BIPT-A). BIPT-A was formulated by Mufson 3 years earlier in a randomized pilot open clinical trial without control (Mufson et al., 2015). The BIPT-A model calls for an abbreviated inventory of interpersonal problems, and sessions are conducted over 8 weeks as opposed to 12 weeks. The population ($N = 48$) comprised 96% LatinX youth, of which 79% were female and 62.5% came from single-parent families. The study took place across four pediatric clinics in New York. At the time of the study, the researchers emphasized the need for access to mental health services for Hispanic youth who were understood to be the least likely to seek mental health treatment for depression (Merikangas et al., 2011). The researchers compared a collaborative care treatment model (and medication, if required) to enhanced treatment as usual (E-TAU) over a period of 16–20 weeks. E-TAU consisted of the traditional care adolescents would have received from their pediatrician or health care provider in a pediatric clinic setting. The SCRIPT-A model included an initial 8 weeks of BIPT-A in phase I. If participants' symptoms had improved, they were scheduled for maintenance sessions in phase II, which entailed three more sessions over a 2-month period, culminating in an independent evaluation. If symptoms had not improved at the 8-week mark (again, assessed by an independent evaluator), the youth were given a further 8 weeks of therapy plus medication. The course of phase II was decided based on severity of psychosocial functioning as measured by the Clinical Global Impression Improvement Scale (CGI-I).

Results from the Children's Depression Rating Scale - Revised (CDRS-R) showed a decrease of 20.67 points for SCRIPT-A (50.69 to 30.02) compared to 19.12 points (52.53 to 33.41) for the E-TAU intervention. No significant differences were found between these groups ($p = .40$), although it should be noted that a majority of participants in both groups reported a clinically significant change on this measure. A moderate effect size was reported, suggesting greater reduction in overall depressive symptomatology for the IPT-A intervention ($d = .35$), and improvement in overall illness severity reflected a large effect (CGI-S: $d = 0.84$).

Most Effective Quantitative RCT Findings for IPT

The strongest evidence for the effectiveness of IPT-A across all RCTs analyzed for RQ1 (in terms of statistical significance) was found by Tang et al. (2009; $p < .001$) and Rosselló & Bernal (1999; $p < .002$).

Tang et al. (2009). Tang et al. (2009) compared scores on the Chinese version of the Beck Depression Inventory (BDI-II) for a school group of adolescents with suicidal risk who received an intensive format of interpersonal psychotherapy (IPT-AN) compared to a TAU group. This study from Taiwan with a participant sample of 73 initially screened 347 students from a junior and senior school in Kaohsiung City in Southern Taiwan. The sample was derived from randomly assigning one-fifth of students from a larger sample inclusive of all classes across junior and senior years ($N = 1,826$).

A variety of Chinese adapted Beck measures were given to the students (including the BDI for depression and anxiety) from September 2005–January 2006. Individuals with moderate-severe depression ($BDI > 19$), previous suicide attempt or current suicidal ideation, experiencing significant hopelessness, or moderate to severe anxiety in the preceding 2 weeks of the study were further evaluated by a psychiatrist. After further screening (exclusion criteria

were drug abuse, acute psychotic symptoms, or serious medication condition), a sample size of 73 was determined (IPT-A-IN intervention consisted of 35 students, TAU = 38). The age range was 12–18 years (mean age = 15) and 65% of the sample was female. Sessions were held twice weekly for 50 minutes for a period of 6 weeks. All of the clinicians had previous training in IPT-A for at least 6 months plus regular weekly supervision. The TAU condition was conducted by eight schoolteachers, all of whom had some training in supportive counseling and psychoeducation; however, none had experience or education in IPT. Postintervention assessments of the BDI (and other measures) were conducted by blind evaluators to the preintervention assessment. Results showed IPT-A-IN had superior effects in reducing depression severity over the course of the 6 weeks ($p < .001$).

Rosselló and Bernal (1999). Rosselló and Bernal (1999) conducted an RCT in Puerto Rico comparing a culturally and ecologically adapted form of IPT-A and CBT (Bernal et al., 1995) to a WL control for a low-income ethnic population ($N = 71$); 54% of the sample was female. Both interventions consisted of 12 one-hour weekly individual sessions that took place over 12 weeks. Self-report measures of depression (CDI) were conducted at pre- and posttest and 3-month follow-up. In acknowledgment of the importance of the construct of *familisimo* in LatinX culture, whereby the family is seen as a tremendous source of psychological support, parents were interviewed before and after each therapy session.

On measures of the CDI, IPT-A was seen as superior to WL control group from pre- to posttreatment: IPT, $F(1, 33) = 11.62$, $p < .002$. A moderate effect size was reported ($d = 0.73$). Similarly, CBT versus control demonstrated a similar finding: $F(1, 37) = 2.58$, $p < .015$; $d = 0.43$. Additionally, a marked decrease in depression severity was seen when comparing IPT and CBT to WL control (pre and post). No significant effects were seen when comparing IPT to CBT on

measures of depression during this time; however, at 3-month follow-up, CDI mean scores for the IPT group increased by 2.96 points whereas a reduction in mean score on the CDI of 4.38 points was observed for the CBT group.

Interpersonal Psychotherapy for Depressed Adolescents Group Format

Rosselló et al. (2012). Thirteen years after the initial study by Rosselló and Bernal (1999), a new study was undertaken to compare individual and group IPT to individual and group CBT for Puerto Rican adolescents. Just over half of the sample came from families whose parents were divorced or separated (52%), with varying SES levels (1.9% = low; 32.1% = middle to low; 58.5% = middle; 7.5% = middle to high). A high completion rate was seen across both IPT and CBT, as 60% in both interventions completed at least 75% of the total sessions. These sessions consisted of 12 one-hour therapy sessions held weekly for 12 weeks (individual condition) and 12 two-hour weekly group sessions held over the same time period in the group condition. The researchers found the format of treatment (i.e., group or individual) did not have an effect on primary outcomes of depression as measured by the CDI: $F(1, 107) = 1.01, p = .316$. When comparing CBT to IPT (regardless of format), a moderate effect was noticed ($d = .43$), suggesting the average adolescent in the CBT interventions was better than 67% of those in IPT. Overall, CBT revealed significantly greater decreases in depression symptoms per the CDI, $F(1, 107) = 5.96, p = .016$, in comparison to IPT.

Despite CBT heralding superiority in this study, it should be noted that both of these treatments were seen to be efficacious at posttreatment. Marked reductions in CDI scores across all formats were also reported with a small effect in favor of individual over group format ($d = .10$). A limitation and threat to the validity of this group outcome finding was the inclusion of

participants in groups spanning a 6-year age difference (12–18 years), which may have resulted in a lack of group cohesion (Rosselló et al., 2012).

Group IPT in Developing Countries (Bolton et al., 2007; Thurman et al., 2017)

Contrasting results were found in two group studies. Bolton et al. (2007) found a significant effect of a decrease in depressive symptomatology for group interpersonal psychotherapy (IPTG) compared to WL control but not creative play, whereas Thurman et al. (2017) reported no significant effect of an IPT-G intervention on reducing depressive symptoms.

Bolton et al. (2007) conducted one of the first psychosocial adolescent studies in a developing country. They found a significant result ($p = .02$) when comparing IPTG to WL in a sample of 314 Acholi war-affected adolescents from Northern Uganda. At the conclusion of treatment, 39 youth met the criteria for recovery (37.1%) and 30 (29.1%) met criteria for remission at posttreatment; however, these decreases in depression were restricted to the females in the study (Bolton et al., 2007). No significant effect was found when comparing IPTG to Creative Play (CP) by War Child Holland (as cited by Bolton et al., 2007), which focused on group activities such as song, dance, role-play, sports, debates, and music (CP was not found to be significant to the WL control). The sample was broken down into two camps (Awer and Unyama) consisting of 172 and 142 youth, respectively. A total of 42% ($n = 131$) of the youth reported a history of abduction from the Lord's Resistance Army, a Christian extremist and terrorist organization. Since its inception in 1987, this group has been responsible for the abduction of over 67,000 youth for use as child soldiers and sex slaves (Day, 2019). The Acholi Psychosocial Assessment Scale was used to measure symptoms of depression at pre- and postintervention. Interventions consisted of 1.5- to 2-hour weekly group sessions (same sex facilitators worked in groups of six to eight) for a total of 16 weeks that were led by a facilitator

from World Vision Uganda who had 2 weeks of onsite training by a faculty member from Columbia University.

In contrast to Bolton et al. (2007), no significant effect of IPTG was found by Thurman et al. (2017) in a study that explored the effect of IPTG on depressive symptoms ($N = 489$; IPT = 260; Control = 229). This was an analysis of a larger, cluster randomized design ($N = 1,017$) from South Africa by Thurman et al. (2016). Thurman et al. (2016) explored behavioral interventions to address the sexual and at-risk behavior of orphaned and vulnerable adolescents in HIV-affected families. By vulnerable, the researchers meant adolescents who had been affected by the HIV epidemic (e.g., having lost a parent to AIDS or an adolescent who currently had a parent with HIV). Youth were assigned to one of four groups: (a) IPTG only, (b) Vhutshilo only, (c) IPTG and Vhutshilo delivered sequentially, or (d) control group. Vhutshilo is an intervention designed to provide life skills related to the prevention of HIV.

The intervention comprised 16 weekly 90-minute groups led by facilitators sourced from the local community. Facilitators received 2 weeks of IPTG training from African psychologists. Outcome measures for depression (i.e., CES-DC) were conducted prior to intervention, at 3 months, and at 12 months post intervention (approximately 22 months after the initial baseline assessment). Mean age was 15 years across the sample consisting of 50% females. Twenty-three percent of participants assigned to the IPTG group ($n = 60$) did not attend any sessions. No significant or treatment moderation effects were found in any of the groups, and it was noted that the sample included youth with varying levels of depression (including participants with no depressive symptoms).

The Last Randomized Control Trial Conducted of IPT-A (Toth et al., 2020)

The last RCT of IPT-A, based upon this SR's inclusion and exclusion criteria, was conducted by Toth et al. (2020). This study had a participant sample of 120 (Mean age = 13.96) including 65% African American. The study compared IPT-A to enhanced community standard (ECS) operationalized as typical services one might receive in a community setting with the addition of extensive outreach made available to youth (e.g., services made available in homes to increase attendance in non-treatment seeking participants). Intent to treat analyses revealed participants in the IPT-A group experienced marginally significantly lower depressive symptoms compared to ECS ($M = 11.92$, $SD = 9.88$, $F [1] = 3.20$, $p = 0.076$).

RQ2: Concomitant Findings Associated With Implementation of IPT-A

This SR included 14 quantitative studies that reported concomitant findings or secondary outcomes associated with the implementation of IPT interventions for depressed adolescents. Of the 14 studies, eight were RCTs, the same studies from RQ1 (excluding Toth et al., 2020), as previously discussed. A further six studies were identified, and these had a range of study designs (single group pretest–posttest, randomized trials, 1-year follow-up), used different IPT-A adaptations (BIPT-A, IPT-AP, IPT-AG), and only two studies had controls (which were adaptations of IPT). Please see Table B4 for a breakdown of studies in RQ2. Specifically, the designs included in these studies were the original Phase I/Phase II study by Mufson et al. (1994), a naturalistic-1 year follow-up (Mufson & Fairbanks, 1996), two single-group pretest–posttest designs (Mufson et al., 2015; Santor & Kusumakar, 2001), and two RTs (Gunlicks-Stoessel et al., 2016; O'Shea et al., 2015) using IPT-AG and IPT-AP as controls, respectively. Of these six studies, four originated in the United States (Gunlicks-Stoessel et al., 2016; Mufson & Fairbanks, 1996; Mufson et al., 1994; Mufson et al., 2015), one was from Australia (O'Shea et

al., 2015), and one was from Canada (Santor & Kusumakar, 2001). A breakdown of these studies is provided in conjunction with the associated findings, followed by a synthesis reported by theme. First, the synthesized associated findings from the RCTs in RQ1 are given.

Synthesized Findings From RCTs

Eight studies were included in these results (see RQ1). Associated findings from the RCTs were, namely, a reduction in depressive severity on outcome measures; an increase in global, social, and general functioning; increases in self-esteem; low attrition and high attendance in sessions; transportability; acceptability and feasibility of the IPT-A approach as reported by parents/caregivers and patients; and effectiveness of the intervention by clinicians with varied backgrounds. A reduction in the number of depressive symptoms and scores was distinct from depression severity (i.e., some participants may report fewer symptoms of depression via self or clinician report on the established measure and not meet criteria for a depressive episode; however, they still might report a sense of severity with respect to the remaining symptoms of depression they are currently experiencing). In addition, many of these findings revealed significant outcomes for low SES, minority, and underserved populations in impoverished urban settings, and especially individuals who self-identified as LatinX; however, one study reported African American participants were less likely than others to comply with treatment (Toth et al., 2020). Only one trial reported *no significant* reductions in depressive symptoms at the conclusion of the group study (IPTG) administered by community workers from South Africa (Thurman et al., 2017).

Transportability, Accessibility, and Feasibility of IPT-A for Minority Youth and Families. In an effort to help depressed adolescents in urban schools and increase psychotherapy participation rates for LatinX youth in underserved communities, Mufson and colleagues

demonstrated the feasibility and transportability of IPT-A from the laboratory to school settings (Mufson, Dorta, Olfson, et al., 2004; Mufson, Dorta, Wickramaratne, et al., 2004) and primary care settings (Mufson et al., 2018). The former study underscores the significance of IPT-A's feasibility through the implementation of an evidence-based practice by school clinicians with abbreviated training. Compared to TAU, the IPT-A condition demonstrated faster and greater symptom reduction (clinician and self-report) and significant overall improvements in social and general functioning with the additional finding that older, more severely depressed youth most benefitted from IPT-A. Greater improvements in social functioning, interpersonal functioning with friends, and problem-solving skills within low SES ethnic populations were similarly reported by Mufson et al. (1999). Tang et al. (2009) also conducted a study in a school setting highlighting the transportability of IPT-A. They explored an abbreviated version of IPT-A, specifically focused on at risk and suicidal youth (IPTA-IN). Decreases in depressive severity, suicidal ideation, hopelessness, and anxiety were all reported. According to the study, the most common areas of interpersonal concern were interpersonal conflicts (90%), grief and loss response (8%), and interpersonal sensitivity and role transition (2%).

Mufson et al. (2018) used a stepped care model (SCRIPT-A) in conjunction with another short-term intervention (i.e., BIPT-A). The researchers examined the feasibility of implementing this approach in pediatric clinics in an effort to decrease the stigmatization of being “in therapy” for Latino youth, and thus increase participant attendance. It was reported to be an intervention adaptable to community settings with existing staff, with both social workers and medical providers alike reporting positive acceptability. These findings also demonstrated benefits to both patients and parents—patients benefited from an increased willingness to engage in psychotherapeutic services (high rate of attendance and low attrition), greater reduction in

depression severity compared to E-TAU, and higher satisfaction with treatment per parent and patient report (86.9% and 88.9%, respectively). According to the clinicians, challenges included limited flexibility due to the use of a treatment manual with guidelines for maintaining a specific treatment focus, difficulty scheduling a patient with both providers, and accommodating missed sessions in a busy medical clinic. This study highlights the transportability of IPT-A to pediatric clinics in urban settings for minority youth.

In addition to the findings of transportability of IPT-A for minority youth, Rosselló and Bernal (1999) reported increases in self-esteem, self-concept, and social adaptation for low SES, Puerto Rican participants receiving IPT-A versus those who were wait listed, a finding not shared by the CBT group in this study. Surprisingly, and in contrast to this study, the same research team 13 years later (Rosselló et al., 2012) found CBT to be more favorable in terms of improving these same constructs of self-concept and social adaptation. The researchers offered an assortment of reasons for this divergent result, from lower adherence to the treatment manual compared to CBT to the CBT clinicians having greater cultural competence.

High Participation Rates and Low Attrition. Low attrition rates were reported within the first RCT in this SR, conducted by Mufson et al. (1999). Youth in this IPT-A sample had much higher completion rates (88%) compared to those in clinical monitoring (46%). A significant difference was observed by Mufson, Dorta, Wickramaratne, et al. (2004) when comparing attendance rates for IPT-A youth versus youth in the control group (TAU). Adolescents in the IPT-A group attended 66% of their sessions versus 49% in TAU. Mufson et al. (2018) additionally reported high participation rates compared to E-TAU where 63% of this sample did not receive mental health services due to unresponsiveness despite clinicians attempts to connect youth to services. Thirty-seven percent ($n = 7$ of 19) received treatment in the E-TAU

condition, compared to 86.2% who completed the SCRIPT-A model of treatment. Of the 35 students assigned to the IPT-AN group (Tang et al., 2009), no youth dropped out of the study compared to three youth assigned to TAU. No significant differences were found between IPT-A, CBT, and WL control groups as reported by Rosselló and Bernal (1999), with IPT-A having a 17% attrition rate. Rosselló et al. (2012) also reported a high completion rate for both IPT and CBT with just over 60% in both interventions completing at least 75% of sessions. The researchers asserted that IPT may be more compatible and culturally congruent for Latino populations due to its interpersonal focus and how this assimilates with the concepts of *familismo*, *respeto*, and *personalismo*. A further significant finding of this study was that this was the first “independent” study conducted on IPT-A using both a control and an already established psychotherapeutic intervention (i.e., CBT).

Additional Findings from Developing Countries Implementing IPTG. IPT-G attendance and acceptance were high in the group study that took place in Northern Uganda (Bolton et al., 2007). Ninety-one of the 105 participants assigned to the IPT group attended at least two sessions (mean sessions attended = 14) with the remaining 14 individuals (13%) reportedly not attending any sessions at all. The number of IPT-G sessions attended was associated with greater symptom reduction, a finding not seen with the two other control groups (creative play and WL). As previously reported in RQ1, these significant findings were restricted mainly to the females in the sample. In contrast, the other IPTG study (Thurman et al., 2017) noted a higher attrition rate (23%); however, of those youth who did attend sessions, there was a 75% mean participation rate ($n = 12$ of 16 sessions). Decreases in anxiety (*ma lwor*) for the IPTG participants were also reported as secondary outcomes. No significant decreases in depression were found by Thurman et al. (2017). Interestingly, in the original study (Thurman et al., 2016),

significant reductions in at-risk sexual behaviors were seen in adolescents who had been assigned to IPTG in conjunction with Vhutshilo, but not in either intervention alone.

RQ2: Concomitant Findings Associated With Implementation of IPT-A From Remaining Quantitative Studies

These six studies spanned from 1994–2016 and had a variety of controls and research designs as stated earlier. These results are reported by a combination of author (i.e., with respect to the timeline and narrative of the IPT-A history of studies), similar research designs, and type of IPT-A adaptation. The results of the Phase I and II studies (Mufson et al., 1994) and naturalistic 1-year follow-up (Mufson & Fairbanks, 1996) are listed first in this SR due to the significance of these studies being the first within the IPT-A literature (in Phase I, the protocol of IPT-A was actually developed). Similar to the reported findings in RQ1, key elements of each study's methodology are shared followed by the associated principal findings. A synthesis of these main outcomes is then provided.

Phase I/II Studies (Mufson et al., 1994)

Participants in Phase I were referred to the Children's Anxiety and Depression Clinic at New York State Psychiatric Institute. The mean age was 15.8 years and 80% of the sample ($n = 4$) was diagnosed with major depression; the remaining participant had a diagnosis of depression not otherwise specified (NOS). Diagnoses were determined by Mufson and Moreau through diagnostic interviewing. No measures were given to the five youth who were scheduled for a mean number of 21 sessions and attended an average of 13.6 sessions (range of 10–17 sessions). Approximately six phone calls were made to the youth across the length of the intervention, and parents attended on average one session. Findings from Phase 1 indicated the youth “appeared to

experience general overall improvement in functioning and none of them appeared to get worse” (Mufson et al., 1994, p. 697).

In Phase II, 14 participants (12 females) were recruited to attend weekly 45-minute sessions of IPT-A for a duration of 12 weeks. Eighty-six percent of the sample ($n = 12$ of 14) were diagnosed with major depression, and one each with dysthymia and NOS/bereavement. The majority of the participants were Hispanic ($n = 11$ of 14; three African American). Only two (14%) participants lived with both biological parents; the remaining participants lived in single-parent households ($n = 4$) or in stepfamily situations ($n = 6$). Depression measures (BDI and HRSD/HAM-D) were administered at 0, 2, 4, 8, and 12 weeks. Scores of ≤ 9 on the BDI indicated the absence of a depressive episode contrasted with a score of ≥ 15 indicating moderate to severe depression (Mufson et al., 1994). Principal findings from Phase II included improvements in social adjustment, in particular with friends and family; improvements in global functioning; and a decrease in physical and psychological symptoms of distress.

Naturalistic 1-Year Follow-Up (Mufson & Fairbanks, 1996)

Mufson and Fairbanks (1996) conducted a naturalistic 1-year follow-up study to assess the depressive symptomatology, social functioning, and life events of the participants from the Phase II sample ($N = 14$). Ten participants (71%) took part in the follow-up study, had a mean age of 17 years, and were all female (70% Latina, 30% African American). Only 10% of the sample lived with both biological parents. Two of the subjects had been attending psychotherapy for 1 year since posttreatment; however, the remaining participants had received little to no psychiatric or psychological treatment. The research team wanted to further understand the relationship between number of negative life events, response to treatment, and rates of recurrence of these negative life events. A Life Experiences Questionnaire was used and was

divided into six categories: conflict, loss, violence, abuse, suicide, and parental discord. Reported findings at follow-up included maintenance from Phase II in the areas of overall adjustment and social functioning, and a decrease in depressive symptoms. Finally, it was also noted that participants reported a positive attitude to the therapy; were all either still in school, enrolling in college, or planning to attend; reported no trouble with the law, pregnancies, or school dropout; and almost all reported they had improved relationships with family.

Single Group Pretest Posttest Studies (Santor & Kusumakar, 2001; Mufson et al., 2015)

Santor and Kusumakar (2001) and Mufson et al. (2015) both conducted quantitative, single group pretest–posttest studies without control groups. The former team conducted an open trial of IPT-A with a predominantly middle class, female population using well supervised novice therapists to administer treatment, whereas the latter evaluated the feasibility, acceptability, and effectiveness of a brief adaptation of IPT-A (i.e., BIPT-A) over a 6-week period in primary care settings with low-income Latino females ($N = 10$). Both studies used measures of the self-report BDI to evaluate depressive severity. Santor and Kusumakar also employed the HRSD to enable clinician-rated severity of depression whereas the CDRS-R was used by the independent evaluator in the Mufson et al. (2015) study. Severity levels of depression at baseline in the Canadian study were very high as rated by the HRSD and the BDI whereas participants were excluded from the BIPT-A study by Mufson et al. (2015) for severe major depressive disorder. Furthermore, high comorbidity (60%), inclusive of diagnoses such as dysthymia, posttraumatic stress disorder (PTSD), anorexia, generalized anxiety disorder, conduct disorder, and social phobia, were evident in the Canadian study, whereas conduct disorder and PTSD were reasons for exclusion in the 2015 U.S. study.

Principal findings across both studies included feasibility, acceptability, and treatment satisfaction; high participation and low dropout rates (only one participant in each study did not complete treatment); a decrease in depressive symptoms; and an increase in global, social (friends and family), and overall functioning. Santor and Kusumakar (2001) also revealed that IPT-A was an effective intervention when implemented by clinicians with no previous IPT experience (with good supervision), and was effective in treating highly comorbid patients with severe depression of moderate to long duration.

Studies Using IPT-A Controls: IPT With Greater Parent Involvement (Gunlicks-Stoessel & Mufson, 2016)

The purpose of this study was to test the feasibility and acceptability of an adaptation of IPT-A entailing greater and more structured parent involvement (i.e., IPT-AP). This adaptation included a combination of individual sessions with the therapist, conjoint sessions with the adolescent's parents, and collateral sessions between the therapist and parent. The structure of working in this way affords the therapist the opportunity to provide parents with the necessary skills to promote better family functioning. For example, through direct observation of the interactions between parent and child in family sessions, the therapist can intervene to teach more effective communication styles. The sample of 15 adolescents, with a mean age of 15 years, was diagnosed with depression and all self-reported emotional/conflictual relationships with their parents at baseline. Mode family income was between \$25,000–\$39,000. Participants were randomized to receive IPT-AP ($n = 9$) or IPT-A ($n = 6$).

Depression measures (i.e., CDRS-R) and measures for family functioning were performed at weeks 4, 8, 12, and 16 by evaluators who were blind to treatment condition. Sessions lasted 45 minutes and were scheduled weekly for 16 weeks in total. Attendance for IPT-

AP was just under one session less than IPT-A (9.3 sessions vs. 10.0 sessions); however, as to be expected, there was significantly greater parent involvement as measured by frequency of attendance of parents in IPT-AP (5.2 sessions vs. 1.5 sessions). Principal outcomes included high treatment satisfaction, acceptability, feasibility, and improvements in depressive symptoms, general functioning, and family functioning. Although two individuals in the IPT-AP cohort did not complete the study versus one individual in IPT-A, treatment retention was reported to be comparable to other clinical trials. Finally, IPT-AP was found to improve adolescent perceptions of the father–adolescent relationship, and mothers' perceptions of their relationship with their children.

Group Versus Individual IPT-A for Depressed Adolescents (O'Shea et al., 2015)

In Brisbane, Australia, O'Shea et al. (2015) conducted a randomized trial testing the efficacy and variables of interest associated with IPT-A (both individual and group formats). The sample was 39 Australians (only 76% of the sample was born in Australia), predominantly Caucasian or from Caucasian ethnic origin (one self-identified Aboriginal), all with a primary diagnosis of MDD. Over half the sample (58.9%) had a least one comorbid diagnosis (predominantly anxiety disorders) and a quarter of the sample met the diagnostic criteria for having two comorbidities. A small sample of the youth were living out of the home (5.1%), 23.1% were from single-parent families, and the majority lived with both biological parents (51.3%). The mean SES was described as low to middle income. The aim of the study was to explore not just the efficacy of the interpersonal interventions, but specifically to examine which format might be more effective for youth (i.e., group or individual), and to also decipher the longer-term effects of the psychotherapy. Participants were randomized either to IPT-A ($n = 19$) or IPT-AG ($n = 20$). Sessions were held once per week over a 12-week duration and lasted 50–60

minutes. At the conclusion of treatment, additional sessions (maintenance) were held at the 1, 3, 6, and 12 month time points. Measures were conducted pre/post and at 12-month follow-up.

Concomitant findings alongside decreases in depression symptoms for both interventions included high rates of participation—participants across both groups attended more than 75% of the therapy sessions. Attrition rates were higher for the individual format versus group format: at posttreatment, 21% ($n = 4$ of 19) individuals in the IPT-A individual condition did not provide posttreatment data compared to zero participants being lost at post assessment in the group condition. An additional three participants in the group condition were unable to be contacted at 12-month follow-up in contrast to one participant in the group condition. Decreases in depression (i.e., majority no longer met criteria for MDD), depression severity, anxiety, number of comorbid diagnoses, and self-reported internalizing problems, as well as improvements in global functioning, were all reported. No significant differences were found between individual and group formats of IPT-A, and both treatment conditions sustained the benefits of treatment at 12-month follow-up.

Synthesized Findings of RQ2

Decrease in Depressive Symptoms. All of these studies reported a decrease in depressive symptoms and depressive severity with the exception of one study (Mufson et al., 1994). Qualitative outcomes from this Phase II study reported the general intensity of remaining symptoms remained; however, there was a decrease in overall symptomatology such that by the end of treatment no participant met the *DSM-III* criteria for depressive disorders. This qualitative outcome contrasts with the finding by Mufson et al. (2015) in a small sample size ($N = 10$) whereby half of the participants were reported to be in the clinical range on the CDRS-R at posttreatment. O'Shea et al. (2015) reported at 12-month follow-up that 90% of the IPT-A group

condition versus 73.7% in the individual IPT-A format no longer met the criteria for MDD. Two individuals within the IPT-AG group who had recovered from MDD had now relapsed, although 80% of the sample maintained recovery from posttreatment and were not meeting the criteria for an MDD diagnosis. The IPT-A individual condition all maintained progress at 12-month follow-up (73.7%); however, there was minimal support for increased sustained treatment benefits of the individual intervention compared to the group intervention over this same period.

The decrease in depressive symptoms as reported by Mufson and Fairbanks (1996) included physical and psychological distress (including somatization, obsessive compulsive symptoms, anxiety, paranoia, interpersonal sensitivity, and alienation). Similarly, O'Shea et al. (2015) reported not only reductions in depressive symptoms but also reductions in internalizing problems, anxiety, and comorbid diagnoses with no significant differences in outcomes between group and individual treatment conditions (from pretreatment to posttreatment). At 12-month follow-up, Mufson and Fairbanks (1996) reported maintenance of reductions in depressive symptoms.

Social, Global, and Interpersonal Functioning. Improvements in social and global functioning and enhancement of the quality of interpersonal relationships (peer and familial) were reported in a number of the studies. Mufson et al.'s (1994) Phase II study reported significant overall improvement in global functioning and social adjustment, as well as improved functioning in role areas of family and friends; however, no significant adjustment was seen in the areas of school and dating. In the naturalistic 1-year follow-up, Mufson and Fairbanks (1996) indicated the majority of participants had maintained improvements in their social functioning since termination the year prior. Gains were seen in all areas of social functioning (i.e., school, friends, family, and dating) from pretreatment to follow-up; however, mean scores were trending

higher (though not significant) in the areas of school, friends, and dating between posttreatment and follow-up. No significant changes were seen at follow-up in the area of global functioning in the year following posttreatment. An increase in social and global functioning was also reported by the two single group designs (i.e., Mufson et al., 2015; Santor & Kusumakar, 2001).

Enhanced Quality of Family and Peer Relationships. The IPT *role area* score of family was the only category within social functioning that decreased during the 12 months since posttreatment (Mufson & Fairbanks, 1996). A poignant qualitative finding revealed that IPT-AP was “more effective than individual IPT-A in improving adolescents’ perceptions of the father–adolescent relationship and mothers’ perceptions of the mother–adolescent relationship” (Gunlicks-Stoessel & Mufson, 2016, p. 229). The quality of the mother–adolescent relationship and the adolescents’ perceptions of mothers’ and fathers’ conflict behaviors were evident for both IPT-A and IPT-AP interventions.

High Treatment Satisfaction. High treatment satisfaction, communicated via measures, low attrition, or high participation, was seen across numerous studies: the naturalistic follow-up study (Mufson & Fairbanks, 1996), the two single cohort pretest–posttest design studies (Mufson et al., 2015; Santor & Kusumakar, 2001), and in the RT studying IPT-AP (Gunlicks-Stoessel & Mufson, 2016). Through the adaptation of increased parent involvement (IPT-AP), high treatment satisfaction was reported in conjunction with significant improvements in depressive symptomatology, family functioning, and general functioning. Mufson and Fairbanks (1996) presented the qualitative finding that 50% of the adolescents stated the treatment length was “just right,” compared to 20% who thought it should “be longer” and 30% who claimed it was “too long.” Additionally, 90% reported the therapist to be “helpful.” Santor and Kusumakar (2001) reported only one adolescent from 25 (4%) dropped out of their study. Participants in the study

by Mufson et al. (2015) rated the treatment as “very helpful.” Interestingly, 43% of the sample stated they would have liked more parent involvement in their treatment. No formal measures examined “treatment satisfaction” in the study out of Australia (O’Shea et al., 2015); however, participants across both individual and group formats attended more than 75% of the therapy sessions.

Treatment satisfaction in the RT of IPT-A and IPT-AP (Gunlicks-Stoessel & Mufson, 2016) per adolescent and parent self-report was comparable between these two interventions (between “good” and “excellent”). On a Likert scale that contained five possible responses (-2 = *very unhelpful*, 1 = *a little unhelpful*, 0 = *made no difference*, 1 = *a little helpful*, 2 = *very helpful*), the most significant qualitative finding revealed adolescent and parent perceptions of their individual sessions with the therapist (i.e., Mufson) were “very helpful” (score = 2). In both IPT-A and IPT-AP individual adolescent sessions, parents reported they would have liked more sessions. Additionally, parents would have preferred more sessions with the therapist individually and more family sessions (in IPT-AP), whereas adolescents felt the frequency of sessions was “the right number.” Adolescents also reported the individual parent and conjoint family sessions to range from being “helpful” to “very unhelpful,” suggesting careful clinical judgment is warranted due to there being “tradeoffs to the level of parent involvement” (Gunlicks-Stoessel et al., 2016, p. 228).

Effectiveness of Intervention by Novice Therapists. Replicating the finding from the RCT by Mufson, Dorta, Wickramaratne, et al. (2004), Santor and Kusumakar (2001) noted that in addition to enhanced treatment gains and increase in overall functioning over the 12 weeks of treatment, other secondary outcomes included the ability to deliver IPT effectively by therapists

without previous experience in the modality to individuals with severe depression (and with a mean onset of 8 months).

RQ3: Potential Variables of Interest, and Mediators and Moderators of IPT-A

This SR also involved identifying potential moderators, mediators, and variables of interest associated with the effectiveness of the IPT-A intervention. This was done by first examining titles and abstracts for the terms moderators or mediators from the original list of 886 studies derived through the search and screening process (as outlined in the methodology). Studies that met the inclusion and exclusion criteria were then carefully read to note the authors' reported identified moderator or mediator variables associated with IPT-A and included in the review. Additionally, the studies included in the review for RQ1 and RQ2 were examined to determine whether any potential moderator or mediator variables were discussed in their texts, and these were also recorded and referenced. Finally, these variables were then grouped together and synthesized to identify any general patterns or sub-groups of variables of interest.

Only two studies had titles that included the word *moderator* (i.e., Betancourt et al., 2012; Toth et al., 2020), and only one study specifically used the word *mediator* in its title (i.e., Reyes-Portillo et al., 2017). The remaining studies used a variety of phrases such as *relationship between*, *effect on*, *the role of*, *predictor of treatment*, and *association with* to address constructs having a potential impact on treatment outcome. Thus, 14 studies were found to best address moderation, mediation, and other variables of interest: 10 were studies that analyzed data from previous trials where measures had been nested within the original participant sample, three studies were RTs, and one study was an RCT (Toth et al., 2020). A large proportion of these subsequent moderator and mediator analyses came from RCTs ($n = 7$): six from Mufson, Dorta, Wickramaratne, et al.'s original 2004 RCT and one analysis that explored moderators of

treatment effectiveness for war-affected youth (Betancourt et al., 2012) was derived from an RCT by Bolton et al. (2007). The remaining three studies that analyzed data from a previous trial all examined the role of attachment style as a mediator (i.e., Gunlicks-Stoessel, Westervelt, et al., 2019; Spence et al., 2016; Zhou et al., 2021). Because many of these additional analyses ($n = 6$) were undertaken from the RCT by Mufson, Dorta, Wickramaratne, et al. (2004) sample, a dedicated section is included in the presentation of the results that follow. The remainder of the studies' results for RQ3 are then synthesized by theme: the mediating roles of attachment style, the hypothalamic pituitary adrenal axis (HPA axis), and the moderating roles of child abduction and child maltreatment.

Mediator and Moderator Results Derived From the Original Study by Mufson, Dorta, Wickramaratne, et al. (2004)

In the original Mufson, Dorta, Wickramaratne, et al. (2004) study, age, level of depression, and level of general functioning were reported to moderate the effectiveness of IPT-A, whereby older adolescents (15–18 years of age), youth with higher levels of depression, and youth who reported poorer general functioning benefitted the most from the IPT-A intervention. In the original RCT, the research team conducted a randomized control trial across five school-based health clinics in New York from April 1, 1999, through July 31, 2002, with a predominantly low-income, Hispanic female sample living in an urban setting. Different measures were then examined that had been previously housed within each of the individuals within the study (Gunlicks-Stoessel & Mufson, 2011; Gunlicks-Stoessel et al., 2010; McGlinchey et al., 2017; Mufson et al., 2014; Reyes-Portillo et al., 2017; Young et al., 2006). These additional analyses explored a variety of potential variables related to effectiveness outcomes: comorbid anxiety; Latinx participants and ethnic-matching, acculturation, and peer

and family interpersonal functioning' perceived interpersonal functioning; critical decision points as a potential moderator; and pilot sequential multiple assignment randomized trials.

Comorbid Anxiety. The impact of comorbid anxiety (Young et al., 2006) was the first analysis to be published after the original study (Mufson, Dorta, Wickramaratne, et al., 2004). Young et al. (2006) found that social phobia, generalized anxiety disorder (GAD), or panic disorder moderated treatment outcome, such that these individuals all had higher depression scores at posttreatment compared to adolescents without anxiety. Additionally, the severity of depression was greater and more difficult to treat. Compared to TAU, comorbid adolescents treated with IPT-A had significantly lower posttreatment scores.

LatinX Participants and Ethnic-Matching, Acculturation, and Peer and Family Interpersonal Functioning. Two studies looked specifically at Hispanic populations within the original sample: Mufson et al. (2014) and Reyes-Portillo et al. (2017). Therapist–patient ethnic matching and indices of acculturation (place of birth and length of residence in the United States) were studied as potential moderators and predictors of treatment outcome by Mufson et al. (2014). For Latino youth born in the United States, greater acculturation was associated with more negative mental health outcomes prior to treatment, specifically school adjustment problems. For youth who were born outside of the United States, greater number of years spent living in the United States predicted fewer social adjustment problems within the family at pretreatment. Interestingly, the findings regarding place of birth as a moderator and predictor of treatment outcome differed between self-report and clinician-rated measures. Per clinician report, place of birth moderated the effect of treatment condition on depressive severity and global functioning and was marginally significant in moderating the effect of depressive symptoms on the HRSD, such that Latino adolescents born in the United States benefitted more greatly from

the IPT-A intervention at week 12 compared to TAU. This was juxtaposed with foreign-born adolescents who showed no significant improvements on these measures at posttreatment. In contrast to clinician findings, adolescents born in the United States self-reported more depression symptoms on the BDI and more negative outcomes associated with school, family, and overall social functioning compared to foreign-born adolescents. This discrepancy was explained through youths' greater negative self-perception of symptoms and functioning. Ethnic matching predicted significantly lower severity scores on the Clinical Global Impressions Scale (CGI), significantly better overall social functioning on the Social Adjustment Scale-Self-Report (SAS-SR), and marginally lower HRSD depression scores at week 12.

Reyes-Portillo et al. (2017) explored peer and family interpersonal functioning as potential mediators of IPT-A treatment on depression and suicidal ideation among a subset of the original sample ($N = 63$), restricting their analysis to youth who self-identified as Latino ($n = 50$). Within the sample that was 86% female with a mean age of 14 years, peer and family interpersonal functioning emerged as significant partial mediators of the relationship between IPT-A and depression. Additionally, a small indirect effect was seen on suicidal ideation, though this was limited to improved family interpersonal functioning. Although the indirect effect of IPT-A on depression was more greatly understood to be a function of family interpersonal functioning, improvements in peer relationships (e.g., skill building, enhanced support, addressing interpersonal problems with peers) also led to decreases in depression. In relation to suicidal ideation, a symptom of depression, the small indirect effect suggested very little of the impact of IPT-A on suicidal ideation was mediated by family interpersonal functioning. Reportedly, most of the benefit of IPT-A was mediated here through a pathway other than interpersonal functioning, a pathway unidentified by the researchers.

Perceived Interpersonal Functioning. Gunlicks-Stoessel et al. (2010) reported a medium to large range effect size for adolescents who had reported higher levels of conflict with their mothers and social dysfunction with their friends when treated with IPT-A compared to TAU. Adolescents who perceived less support from their families and greater difficulty in expressing and sharing their feelings had poorer outcomes across treatment conditions. Furthermore, perceived dysfunction at school (i.e., academic functioning, levels of happiness at school) predicted poorer treatment from both IPT-A and TAU.

McGlinchey et al. (2017) explored the relationships between interpersonal functioning, sleep disturbance, and depression. Regardless of treatment condition, sleep disturbance predicted increases in depression pretreatment as evidenced by scores on the BDI and HRSD, in addition to poorer interpersonal functioning. These outcomes were also seen throughout the course of treatment as measured at each assessment point. It was additionally suggested that sleep disturbance may signal a more severe form of depression due to the reported treatment-resistant nature of the symptomatology.

Critical Decision Points as a Potential Moderator (Gunlicks-Stoessel & Mufson, 2011). Critical decision points, in the context of this SR, refer to the presence of an optimal time point; specifically, a particular week over the course of treatment that was associated with enhanced outcomes for depressed adolescents receiving IPT-A. Three studies explored this construct, beginning with Gunlicks-Stoessel and Mufson (2011), from the 2004 RCT by Mufson, Dorta, Wickramaratne, et al. (2004). They explored whether reduction in depressive symptomatology at different time points over the course of therapy predicted or signaled that remission of depression was likely. It was found that a decrease in 16.2% on the HRSD measure score at week 4 (for IPT-A) represented the best combined sensitivity and specificity that best

predicted remission rates for depressed adolescents by the termination of treatment (compared to 24.4% for TAU) at week 16. Hence, symptom reduction during the early weeks of psychotherapeutic intervention signaled remission status was likely with the full course of IPT-A. The researchers were left wondering what course of treatment should follow for individuals not showing significant improvement at week 4.

Pilot Sequential Multiple Assignment Randomized Trials (Gunlicks-Stoessel, Mufson, et al., 2019; Gunlicks-Stoessel et al., 2016). In 2016, a pilot sequential multiple assignment randomized trial (SMART) design addressed this exact question (Gunlicks-Stoessel et al., 2016) with an additional pilot SMART trial then following 3 years later (Gunlicks-Stoessel, Mufson, et al., 2019) that refined the earlier study. Gunlicks-Stoessel et al. (2016) conducted the pilot SMART with 32 participants consisting of predominantly White, upper-class females. The researchers examined the feasibility and acceptability of the treatment procedures (time point and best adaptive treatment strategy for insufficient responders to IPT-A). First, the team wanted to know which time point (week 4 or week 8) best signaled an adolescent's unresponsiveness to treatment if the current course of treatment was maintained. For individuals who were responding well to treatment (as measured by reductions of $\geq 20\%$ on the HRSD measure of depression), the current course of IPT-A treatment ensued. Second, how should treatment be augmented for these non-responders? Through increased IPT-A sessions (twice a week for an additional 4 weeks totaling 16 sessions) or adding Fluoxetine medication? Results indicated week 4 was the more feasible and acceptable decision point for assessing the potential need to change the course of treatment, as evidenced by responses on measures, higher attrition, and higher treatment satisfaction compared to week 8.

Results from the second pilot SMART (Gunlicks-Stoessel, Mufson, et al., 2019) with 40 participants bolstered the original findings. Again, week 4 was identified as the optimal decision point for assessing treatment response. Augmenting IPT-A sessions for non-responders at week 4 was seen to be more efficacious in decreasing depressive symptoms than augmenting sessions of IPT-A to insufficient responders at week 8. Adding Fluoxetine at week 4 for non-responders produced better results on depression measures than increasing IPT-A sessions at week 8. The algorithm that assessed for depressive symptoms at week 4 and augmented IPT-A sessions was more successful than adding Fluoxetine at week 8 for those individuals who were not responding sufficiently to treatment. No significant differences in outcomes were found at either time point when the decision made was to increase IPT-A sessions or add Fluoxetine. Two additional data analyses were conducted from this SMART trial (Gunlicks-Stoessel, Westervelt, et al., 2019; Zhou et al., 2021) and these are reported below.

The Moderating Role of Attachment Style

Three studies reported the association between the impact of IPT-A and attachment style (Gunlicks-Stoessel, Westervelt, et al., 2019; Spence et al., 2016; Zhou et al., 2021). All studies were additional analyses: one by Spence et al. (2016) whose analysis was derived from the earlier randomized trial in Australia by O'Shea et al. (2015), and the remaining two analyses (Gunlicks-Stoessel, Westervelt, et al., 2019; Zhou et al., 2021) were derived from the pilot SMART by Gunlicks-Stoessel, Mufson, et al. (2019).

Spence et al. (2016) found reductions in insecure attachments (anxious and avoidant) and improvements in secure attachment styles were reported by youth from pre- to posttreatment as a function of the IPT-A intervention. This finding was replicated by Gunlicks-Stoessel, Westervelt, et al. (2019), who also noted greater avoidant attachment at baseline predicted greater reductions

in depression as well as more comfort with intimacy, decreased discomfort in close relationships, and decreased discomfort in being alone. In addition, Zhou et al. (2021) reported decreases in anxious attachment and avoidance, and further noted that as a function of these decreases in insecure attachment, improvements in negative cognitions and dysfunctional attitudes emerged. Although no causal inferences can be made, changes in attachment styles in youth may be seen as an important mechanism of change in dysfunctional thinking patterns. Thus, shifts to a healthy-secure attachment style illuminates the finding that an interpersonal approach to therapy may in fact address underlying cognitive vulnerabilities.

Spence et al. (2016) found that over a 12-month period, the greatest reductions in depression were observed among youth who reported an increase in secure attachment style, greater improvement in social skills, and a decrease in parental conflict, specifically with the mother. Notably, however, the changes in parent–adolescent conflict and improvements in social skills were not evident from pre- to posttreatment, only from pretreatment to 12-month follow-up. Interestingly, this finding suggests these interpersonal variables are unlikely to mediate changes in depression due to a reduction in depressive symptoms being already apparent at posttreatment. Thus, improvements in interpersonal functioning could be a consequence rather than a cause of reductions in depression.

Hypothalamic-Pituitary-Adrenal (HPA) Axis

In a randomized trial comparing IPT-A and IPT with parental involvement, Gunlicks-Stoessel et al. (2013) also investigated the moderating role of the neurobiological stress system (operationalized as the HPA axis) on treatment outcome. The sample comprised 15 predominantly low-income, Hispanic females (86.7%) who were experiencing high conflict with their parents. Youth and their parents were asked to engage in a discussion on a problem area of

their relationship for 15 minutes with the intention to best resolve the issue. The issue was identified using a parent–adolescent conflict measure completed at the beginning of session. Cortisol samples were taken at four different time points (right before the conflict task, 10 and 20 minutes after the conflict task, and 30 minutes after the task). Cortisol levels were positively correlated with pretreatment depression scores such that high cortisol levels predicted the severity of baseline depressive symptoms, specifically higher cortisol levels at time point 2. Higher levels of cortisol at time point 4 were associated with greater improvements in depressive symptoms with IPT-A at the same time point. Complementing the finding that youth with avoidant attachment styles do not respond as well to IPT-A, youth with lower cortisol levels at the final time point did not benefit as well from the intervention, highlighting a potentially withdrawn or disengaged interpersonal style. In contrast, higher cortisol levels in youth might be indicative of the desire for these individuals to repair ruptures in their interpersonal relationships. The researchers postulated that although youth with high cortisol levels may be more prone to greater psychopathology in adolescence, these same youth are also very receptive to warm, supportive, nurturing environments, thereby supporting the interpersonal approach as seen with psychotherapeutic interventions like IPT-A and further supporting the moderating role of cortisol in impacting the effectiveness of IPT-A.

Abduction History and Child Maltreatment as Moderating Factors

Two studies investigated the moderating roles of abduction history and child maltreatment (Betancourt et al., 2012; Toth et al., 2020). Betancourt et al. (2012) analyzed data originally collected by Bolton et al. (2007), who conducted an RCT comparing group interpersonal therapy (IPTG), creative play, and WL/control in two internally displaced people (IDP) camps near the town of Gulu, Northern Uganda. Betancourt et al. (2012) examined the

moderating impact of abduction history on treatment outcome and found adolescent girls without a history of abduction benefited more from IPTG in contrast to males with no history of abduction. Male and female former child soldiers both benefitted from the group intervention. Toth et al. (2020) found the treatment efficacy of IPT may be moderated by child maltreatment such that increased reports of maltreatment (e.g., emotional abuse, physical abuse, etc.) resulted in greater benefits for those youth receiving IPT-A compared to the control group (enhanced community standard). When further dissected, a history of sexual abuse moderated treatment outcome such that IPT-A was more efficacious and the effect size was large. Additionally, IPT-A demonstrated significant improvements in depressive symptoms compared to enhanced community standard when victims endorsed multiple subtypes of maltreatment (e.g., for girls who did not have a history of maltreatment, there was no significant difference between intervention effects). Notably, IPT-A was seen to be more effective among girls with a history of sexual abuse in the reduction of depressive symptoms compared to enhanced community standard (ECS), and the effect size was large ($p = 0.004$).

Chapter 4: Discussion

The main findings from this SR that IPT-A is effective in decreasing the symptoms of depression and is also effective by providing an array of positive secondary outcomes have been supported by past meta-analyses on IPT-A (i.e., Duffy et al., 2019; Mychailyszyn & Elson, 2018; Pu et al., 2017). This narrative synthesis (without meta-analysis) of these quantitative studies also was designed to elucidate potential moderators, mediators, and variables of interest associated with the reported outcomes of effectiveness.

RQ1: Quantitative Results From RCTs

Summary of Main Findings: Interpreting the Quantitative Data

The mean p -value associated with the effectiveness of IPT (and its adaptations) on decreasing symptoms of depression (versus controls) was $p = .083$, suggesting the effect of the intervention is approaching statistical significance ($p = .05$); however, this mean p -value needs to be interpreted with much caution. First, the mean is not an accurate representation of the results from the nine RCTs due to the inconsistent reporting of p -values related to reductions in depression. The method of calculating p -values varied across studies, resulting in a potential overestimation or underestimation of the effectiveness of IPT-A in reducing depressive symptoms. Related to overestimation, two studies did not offer p -values for effectiveness (i.e., Rosselló et al., 2012; Thurman et al., 2017) and the reports stated IPT-A was not effective against controls. Additionally, Mufson et al. (1999) and Mufson, Dorta, Wickramaratne, et al. (2004) offered two p -values for each of the studies here (related to different depression measures) and these were both calculated into the mean. Rosselló et al. (2012) offered a value of $p = .016$ in favor of CBT over IPT but there was no meaningful way of calculating this into the mean (as no p -value was given for IPT). IPT was still effective in reducing depression, even

though it was not superior to CBT. This study also had no wait list or TAU control. Thus, an underestimation of effect could be argued here as well. Additionally, the researchers in this study reported low fidelity in relation to clinicians abiding by the IPT-A manualized treatment compared to adherence to the CBT manual, and it was also stated CBT clinicians may have executed treatment with greater cultural competency than the IPT-A clinicians (Rosselló et al., 2012). This may explain some of the reason for the significant CBT superiority finding. Second, a non-significant p -value was reported ($p = .4$) in the stepped care study (Mufson et al., 2018) comparing BIPT-A to enhanced treatment as usual (E-TAU) on a measure of the CDRS-R. Yet, both treatments were still effective in significantly reducing depressive symptoms. Thus, the p -value does not truly offer an accurate representation of the effect of IPT-A in reducing depression symptoms, it simply indicates it was not significant compared to control. It may have been helpful if the researchers had a p -value correlated with pre- and posttest scores on the measure. Third, due to the specified classification of *randomized trials* versus randomized “control” trials as outlined in this review’s methodology, two studies’ p -values were not included as RCTs, and this may have resulted in an underestimation due the significance of these studies’ findings.

Mean P-Value Across all Quantitative Studies in RQ1 and RQ2

When calculating the p -values from the six remaining quantitative studies that were not RCTs, the mean value was $p < .003$. It is important to remember that four of the six trials had no control or comparison group and the remaining two studies used an adapted versions of IPT-A as controls. Additionally, all six studies had small sample sizes with a mean of 19 participants. It may be difficult to generalize these results to larger samples and some of the studies included in this analysis may have been underpowered. When examining the p -values across all quantitative

effectiveness studies for both RQ1 and RQ2 combined, a mean value was arrived at of $p < .04$. Interestingly, the median p -value across RTCs was calculated as $p = .04$ as well. In summary, most of the RCTs reviewed revealed participants receiving IPT-A experienced significantly greater reductions in depression from baseline to posttreatment compared to controls. The types of controls in studies where p -values were not given or were non-significant included CBT, enhanced community standard, enhanced treatment as usual, Vhutshilo (designed to provide HIV prevention skills), and TAU.

The nature of the samples included in these studies appeared to be linked to the effectiveness of IPT-A, but further research is needed to more clearly elucidate the relationship between client characteristics and the effectiveness of IPT-A. For instance, the participants in the Thurman et al. (2017) study were orphaned adolescents due to AIDS or adolescents who were living with chronically ill parents. Neither the control nor IPT-G group were effective in decreasing symptoms of depression from baseline to posttreatment (3 months after last session) and follow-up (1 year later). These results might suggest IPT-G is not effective in treating this specific population; however, one other study from sub-Saharan Africa (Bolton et al., 2007) reported significant results of IPT-G in treating war-affected youth. Because both of these studies engaged in similar protocols (i.e., facilitators across both studies were recruited from the community, were instructed in the facilitation of the group intervention over the same period, and were using the same manualized treatment adapted by World Vision), it is difficult to decipher what may account for such contrasting findings, other than looking at the distinct differences between these populations being served. Further research is required to gain a better understanding of the utility of IPT-G in treating the orphaned youth population in sub-Saharan Africa, especially given the findings reported by Bolton et al. (2007).

Generalizability of Results of RCTs

It is difficult to generalize the results of these RCTs due to the IPT interventions having been administered to samples that disproportionately self-identified as female, LatinX, and non-Caucasian. Out of the nine RCTs identified in this SR, only one study included Caucasian participants (Toth et al., 2020), who made up 20% of the all-female sample. Additionally, African Americans were included in only two studies in this review (i.e., Toth et al., 2020; Mufson et al., 2018). Furthermore, results from the RCTs were derived from a great deal of heterogeneity: five different IPT adaptations, large ranges of sample sizes and varying proportions of male and female participants, a variety of different measures (eight in total inclusive of adaptations of the BDI), and inconsistent reporting of *p*-values and effect sizes.

RQ2: Concomitant Findings From RCTs and Other Quantitative Studies

Findings regarding secondary outcomes examined in the sample of studies in this review included increases in peer and family interpersonal functioning, increases in social skills, improvements in overall general functioning, and decreases in comorbidities, including anxiety and suicidal ideation. These significant effects were seen in some studies at both posttreatment and follow-up. A decrease in depressive symptoms or severity was seen across all but one of the studies (i.e., Thurman et al., 2017). Most studies reported an increase in either social or global functioning. An increase in family and peer interpersonal functioning was reported in approximately one third of the studies. Additional secondary findings included high attendance of sessions, low attrition, the transportability of IPT-A to pediatric clinics and schools, and feasibility as reported by a variety of clinicians who administered the intervention.

One of the main strengths of IPT-A was seen to be its transportability (i.e., its success being delivered at schools and pediatric clinics within underserved populations, particularly

LatinX and low SES). Additionally, effective interventions were delivered by clinicians with varying professional backgrounds and experience with IPT. Variations of IPT-A were also seen to be effective and included a group implementation, a briefer version of IPT-A, and an adaptation for greater parent involvement. A stepped care/collaborative approach model (using BIPT-A) was successfully used in a pediatric clinic to destigmatize mental health treatment for youth and enhance attendance. Contrary to the findings for low attendance in the literature where the average number of mental health treatment sessions attended was between three and four visits (Brookman-Frazee et al., 2008), IPT-A was seen to have high attendance of sessions and low attrition rates.

Secondary outcomes were also not constrained to the depressed youth, but heralded benefits to their families. In addition to parents' self-reports that IPT-A was helpful for them in the family sessions, it also seems reasonable to imagine the improvements in youth communication and interpersonal skills being of benefit to the parents. Similarly, the helpfulness of IPT-A for parents might be understood as a function of the unique psychoeducation component of IPT-A (provided by the therapist in the initial phase of treatment) whereby the therapist reframes the youth's depressive symptomatology as a "limited sick-role," or an illness that will improve over time with treatment. This may offer comfort to parents who may interpret depressive symptoms such as low motivation (avolition) and a lack of interest (anhedonia) as signs of defiance. All of this being said, it would be worthwhile if future studies of IPT-A identified more systematically the specific reasons why parents, youth, and families found the intervention to be so helpful. In so doing, clinicians might be able to focus their specific interventions on these areas of treatment to maximize impact, engagement, and attendance

(where attendance might be low). It may also help answer the question as to *why* the intervention is successful.

RQ3: Potential Moderators and Mediators Associated With IPT

Two mediators and several moderators associated with the effectiveness of IPT-A were identified in this review. Changes in family and peer interpersonal functioning were both found to partially mediate the impact of IPT-A on depression (Reyes-Portillo et al., 2017). Moderators included comorbid anxiety inclusive of panic disorder, perceived interpersonal dysfunction, critical decision points across the course of therapy, acculturation indices of youth (place of birth and time spent in the United States), ethnic matching between therapist and client, sleep disturbance, type of child maltreatment, abduction history, gender, type of attachment style, and cortisol levels.

The majority of the studies examined for mediators and moderators were exploratory in nature and therefore the results should be interpreted with caution. Additionally, most of the moderation studies lacked targeted designs, making it difficult to isolate the components of IPT that may be associated with its effectiveness (e.g., role-play versus problem solving). Furthermore, exploratory analyses in some studies had small populations, or no control group, or participants from the same demographic (e.g., all female, all Caucasian, all LatinX), making it difficult to generalize the results to other populations. Last, for mediation to be understood with confidence, multiple studies need to replicate the same finding, and this was not observed in this SR.

LatinX: Peer and Family Interpersonal Functioning, Level of Acculturation, and Ethnic Matching

This SR revealed improved family and peer interpersonal functioning were *significant partial mediators* of the relationship between IPT-A and depression in an all-female Latina sample (Reyes-Portillo et al., 2017); however, a larger proportion of this indirect effect was accounted for by dysfunction in family relationships compared with peer relationships. This finding was supported by Ackard et al. (2006), who reported in a sample of 4,746 adolescents that valuing friends' opinions over parents' opinions was associated with depression. The IPT-A approach that resulted in improvements in family and peer interpersonal functioning is also supported by the adolescent literature—perceived problems with parents such as low parental communication and caring and difficulty talking to parents have all been reported as risk factors for depressive symptomatology (Ackard et al., 2006; Donald & Dower, 2002).

The results of this review were consistent with the literature regarding the protective factor of family connectedness against depression and other mental health disorders (Hall-Lande et al., 2007). The protective effect of two-parent families was also highlighted by Costello et al. (2008). Although not all studies in this SR revealed whether youth came from nuclear or single-parent households, of the studies that did report this detail, a range of 52%–80% of youth being in single-parent households was noted. The protective factors of family connectedness within non-LatinX populations may appear analogous to the LatinX cultural construct of *familismo*, which can be defined through the values of loyalty, honor, support, interconnectedness, and subjugation of self for family (Stein et al., 2015; Yoder & Romero, 2021). This cultural construct, alongside the constructs of *respeto* (respect) and *personalismo* (friendliness), is understood to be a protective factor against mental health issues in LatinX youth (Galicia, 2019;

Montoro & Ceballo, 2021; Stein et al., 2015), and were all reported to be affected positively by IPT-A in this review by four studies (Mufson et al., 2014; Reyes-Portillo et al., 2017; Roselló & Bernal, 1999, Roselló et al., 2012). Roselló et al. (2012) alluded to the possible mediation effects of the cultural constructs of *familismo*, *personalismo*, and *respeto*, though future research was reported as warranted. Last, although *familismo* has been reported to be a protective factor against depression, family-related stress also has a greater impact on youth mental health outcomes. The source of family stress in LatinX families appears to be associated with cultural stressors (Montoro & Ceballo, 2021) such as enculturation, acculturation, and the model of intergenerational acculturation conflict evident within many LatinX families and immigrants from diverse populations.

In this SR, the impact of acculturation on mental health outcomes for LatinX adolescents was seen to moderate the effectiveness of IPT-A. For LatinX youth born in a foreign country with greater number of years living in the United States, less family and social distress were reported at baseline compared to LatinX youth born in the United States (Mufson et al., 2014). Additionally of interest was the discrepancy between objective reports of depression on clinician-administered measures compared to subjective report by LatinX youth born in the United States who self-reported greater symptoms of depression and social dysfunction. The discrepancy was explained by greater negative self-perception of symptoms and functioning; however, it should not be discounted that these findings might be a reflection of clinician bias.

It was interesting that despite the large sample of LatinX individuals across all of the studies in this SR, no data were reported regarding LatinX youths' acculturation attitudes, as proposed by Berry's (1997) bidimensional acculturation model. In this model, Berry outlined four potential adaptations or attitudes that individuals experience in the acculturation process:

integration, assimilation, separation, and marginalization. The healthiest outcomes are reported by youth who *integrate* or identify as *bicultural*, as opposed to youth who might reject both their culture of origin and the dominant culture in which they are now living (*marginalization*). The latter results in the worst mental health outcomes for youth (Fox et al., 2013; Wei et al., 2010); however, this review was unable to ascertain what attitude/adaptation the youth identified with who received IPT-A. Reports from the wider literature revealed ethnic minority college students who were able to function in both their ethnic and dominant cultures (*integration acculturation adaptation*) had better health outcomes and experienced fewer depressive symptoms than students who were unable to do so (Wei et al., 2010). Some studies have examined the relationship between these acculturation adaptations and LatinX adolescents internalizing symptoms and self-esteem (Smokowski et al., 2009); however, to this author's knowledge, the potential moderating role of these constructs with regard to IPT-A treatment's effectiveness has not been studied. For instance, is there greater treatment effectiveness in LatinX youth who identify as *integrated* as opposed to *marginalized*? Perhaps youth who identify as *marginalized* benefit more greatly from IPT-A. This is unclear. What might the moderating effects of *assimilation* and *separation* on IPT-A effectiveness look like? Finally, ethnic matching was seen to significantly predict decreases in depression severity, marginally lower depression scores on the HRSD, though this was the only study that examined this moderating role on treatment effectiveness. The finding builds upon some of the existing literature that has reported greater symptom reduction and higher ratings on the therapeutic alliance (Bhati, 2014; Blow et al., 2008) as a function of gender matching in the client–therapist dyad, specifically when the dyad is female client–therapist.

Parental Involvement in Therapy

This SR revealed mixed results as to the need for parent involvement (Gunlicks-Stoessel & Mufson, 2016; Mufson et al., 2015). Although lack of parental warmth and availability are risk factors for youth depression (Sander & McCarty, 2005), parental warmth may not be a protective buffer for youth depression when maternal warmth is lower than that of fathers (Jorm et al., 2003). These findings from the broader literature perhaps support the mixed findings from adolescent reports in this SR regarding parental involvement in therapy. Having interventions that engage parents in the psychotherapeutic process to improve the quality of connection within these dyadic/triadic relationships with depressed youth appears imperative, but to what degree? Forty-three percent of the sample (Mufson et al., 2015) stated they would have liked more parent involvement in their treatment (Brief Interpersonal Psychotherapy for Depressed Adolescents), whereas in the 2016 study by Gunlicks-Stoessel et al. that focused on greater parent involvement (IPT-AP), youth reported a range of responses from parental involvement being “very unhelpful” to “very helpful.” In contrast, parents reported they would have liked more sessions. The overall effectiveness of treatments that involve children and adolescents exclusively has been reported in the literature to be very similar to that of treatments that include parents as agents or facilitators of change (Sander & McCarty, 2005). Nevertheless, protective factors for depression have also been reported within the literature and within this review, including the positive impact healthy family relationships might have on adolescents in ameliorating symptoms of depression (Diamond et al., 2002; Reyes-Portillo et al., 2017; Spence et al., 2016). The degree to which parents need to be involved may require careful clinical judgment because youths’ perceptions of parental involvement may vary.

Attachment

Three studies in this review explored the relationships between attachment style, IPT-A, and depressive symptoms. Insecure attachment styles (both avoidant attachment styles and anxious attachment styles) are more commonly seen in depressed youth compared to non-depressed youth (Kent & Bradshaw, 2021; Rawatlal et al., 2015; Spruit et al., 2020), and this finding from the literature was supported by the studies included in this review (i.e., Gunlicks-Stoessel, Westervelt, et al., 2019; Spence et al., 2016; Zhou et al., 2021). One study in this review (i.e., Gunlicks-Stoessel et al., 2013) measured cortisol levels in youth at four different time points after a parent–child conflict. Youth who had higher cortisol levels were associated with having insecure attachment (as evident by the need for these youth to resolve and repair rupture). In contrast, youth with avoidant attachment styles had lower cortisol levels and appeared indifferent to resolving the conflict. These results build on existing evidence that showed youth with an anxious attachment style reported more brooding and dampening of positive affect to elicit caregiver response, whereas avoidant-attached youth reported decreased focusing on experiences of positive affect (Verhees et al., 2021). Excessive reassurance seeking, as seen with an insecure attachment style, is also understood to be a function of youths’ perceptions of whether their caregiver will be receptive or available to their needs. This excessive reassurance has also been reported in the literature to moderate the relationship between youths’ perceptions of parenting and depressive severity (Abela et al., 2005). The finding that greater reductions in depression were seen in youth with anxious attachment styles was not reported by the other studies exploring attachment in this review; however, the IPT adult literature indicates anxious attachment predicts poorer response to treatment (Ravitz et al., 2008). Similarly, a finding within the adult literature on IPT showed that although anxious and avoidant

attachment did not moderate treatment outcomes, anxious attachment predicted more positive outcomes (Bernecker et al., 2016). A decrease in both negative and anxious attachment styles was reported by the three studies in this review (Gunlicks-Stoessel, Westervelt, et al., 2019; Spence et al., 2016; Zhou et al., 2021), which led to a decrease in depressive symptoms; however, the sample sizes were small, there was an absence of a control making it is unclear whether these findings are unique to IPT-A, and most of the sample was female and Caucasian, thus limiting the generalizability of the findings. Additionally, the measures of attachment were conducted via self-report and therefore it is possible objective reports via interviews/observational assessments may have produced differences in the determination of attachment style.

Despite these limitations, it seems reasonable to posit that the theoretical underpinnings of IPT-A that encourage clinicians to focus on areas of interpersonal such as the quality of interpersonal relationships, interpersonal problem solving, interpersonal deficits and skills, role disputes, role transitions, grief associated with interpersonal loss, communication skills, and the building of social support from family, peers, and significant others all contribute to reduce insecure attachment styles and build healthier ones, the result of which leads to happier youth who ultimately feel less depressed.

Strengths and Limitations of Findings

A strength of this review is the inclusion of an array of IPT-A adaptations and quantitative research designs, which then resulted in a diverse sample of studies in the final synthesis. The included studies spanned a range of sample sizes, settings, treatment modalities, and demographic characteristics, increasing the generalizability of the findings. The analyses also expanded upon an examination of statistical significance by including a review of potential

moderators and mediators of the effects of IPT-A. A limitation of this review is in the difficulty of future researchers to replicate the narrative synthesis process that was engaged in by the author because it may have contained bias. Thomson and Campbell (2020) recently reported this type of problem within the literature when it comes to the replication of narrative synthesis through the establishment of protocols outlined in the methodology. In fact, in a study of 60 Cochrane systematic reviews, 70% did not provide clear links between data and the narrative, and only 18% reported details of the method used, despite over half (53%) stating the synthesis they used (Thomson & Campbell, 2020).

An additional limitation to the generalizability of the results presented here is that relatively few participants in the studies reviewed were male. This could be expected based upon the stigma associated with mental health by males whereby internalizing disorders do not conform to traditional gender role stereotypes (Addis, 2008), although it is unclear whether this stigma accounted for the underrepresentation of males in the studies included in this review. Although research suggests females are three times more likely to experience depression than are males (Klerman & Weissman, 1989; NIMH, 2022), male adolescents may in fact experience depression at the same rate as females; however, it may be more likely that male sadness is expressed as anger, irritability, and restlessness, and hence the diagnosis of an externalizing disorder such as oppositional defiance (American Psychological Association, Boys and Men Guidelines Group, 2018; Khesht-Masjedi et al., 2017). Females, on the other hand, may be more likely to experience and express feelings of sadness, guilt, and worthlessness (Khesht-Masjedi et al., 2017) than anger, and are hence more likely to be given diagnoses of internalizing disorders such as major depression. Additionally, females are more likely to seek treatment if experiencing depression. In 2018, 45% of female adolescents sought treatment for their depression compared

to only 33% of their male counterparts (Geiger & Davis, 2019). This may also account for the disproportionate representation of females in these IPT-A studies. Future studies could examine the impact of IPT-A on male adolescents diagnosed with externalizing disorders such as oppositional defiance.

Directions for Future Research

In addition to the suggestions provided in the previous section, future studies could examine which areas youth and clinicians identified as the IPT-A *problem areas* to be addressed in the therapy. Only one RCT reported these details (i.e., Tang et al., 2009). It would be interesting to determine whether any patterns emerged through the identification of these problem areas. For example, do a preponderance of youth choose *role transitions* as their problem area, or are they choosing *interpersonal deficits*, *interpersonal role disputes*, *grief*, or *single-parent families*? What might the changing patterns of these choices reveal over time? Are there any trends in the problem areas chosen that might differ by gender or by age? What might these problem areas be that are associated with these youths' depression? Over time, the identification of these problem areas by specific demographics may be helpful in offering clinicians and researchers a better picture as to what is driving depression in these youth. For example, if what emerges is that most females over time chose *interpersonal role disputes* as their problem area or there was a statistically significant identified trend that detected Caucasians choosing *single-parent families* as theirs, might these problem areas then offer clearer insight into the potential causes of depression for these specific youth? And might these problem areas offer guidance and direction through which to further investigate potential mediators of IPT? Within this review, only one study specifically reported the finding of an identified mediator, as family and peer interpersonal functioning were significant partial mediators of the relationship

between IPT-A and depression (Reyes-Portillo et al., 2017). It is unclear, however, with which interpersonal problem area of IPT-A this mediator might have been associated. This may be an important finding for the IPT-A literature on the identification of further mediators in what appears to be a tricky and exhausting endeavor.

Chapter 5: Conclusion

Clinical Implications and Conclusions

This SR was conducted in an attempt to synthesize a diverse range of approaches to IPT for depressed adolescents. Though the samples across the studies in this review were diverse, the majority of included the studies examined the effectiveness of IPT-A among LatinX samples. This is an encouraging finding for psychological science though, particularly within the United States where the need to extend research findings to underserved populations remains imperative (Ramirez, 2022; Roselló & Bernal, 1999, Roselló et al., 2012). IPT-A remains an effective and important psychotherapeutic intervention for depressed adolescents.

It is a great shame, given the established efficacy of IPT-A as a psychotherapeutic intervention, that it is not well known to students and teachers alike within academia. Undergraduates, though in particular master's- and doctoral-level students who engage in psychotherapy practice, know very little about the specifics of this intervention, yet no doubt could explain the cognitive triad, the principles of cognitive distortions, and behavioral activation within CBT; the principles of distress tolerance, mindfulness, and emotion regulation as seen within dialectic behavior therapy (DBT); or even key components of psychodynamic, humanistic, or multicultural approaches to psychotherapy. In the quest for excellence in psychotherapy, academic training and governing bodies like the American Psychological Association not only strive but insist on students reaching certain benchmark competencies. One of these competency benchmarks pertains to science-related competencies, a closer inspection of which reveals students must not only demonstrate knowledge and understanding of application of the *concept* of evidence-based practice, but more importantly develop an understanding of the concept by *administering* these psychotherapeutic orientations (inclusive of case

conceptualization, treatment planning, etc.). How can it be then, that a well-established treatment and evidence-based practice such as IPT-A is not more widely disseminated and taught throughout academic institutions to the same extent as the aforementioned modalities? With the rise in youth mental health issues, in particular, increases in depression and youth suicide exacerbated by the COVID-19 pandemic (Gruber et al., 2021; Magson et al., 2021), it seems an imperative that psychology graduate students have a deeper appreciation of and are given the opportunity to acquire the necessary skills to implement IPT-A for those youth who are so desperately in need of help.

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APPENDIX A

List of Search Terms

<u>Search Term ID#</u>	<u>Primary Term</u>	<u>Synonyms/ Alternate Forms</u>
01	Interpersonal Psychotherapy	“IPT,” “IPT-A,” “Interpersonal Therapy”
02	Adolescents	“Youth,” “Teens,” “Teen,” “Teenagers,” “Young Adults”
03	Depression	“Depressed,” “Depressive disorder,” “Depressive Symptoms,” “Major Depressive Disorder,” “Major Depression,” “Dysthymic Disorder,” Depression Disorder not otherwise specified”
04	Effectiveness	“Efficacy” or “Effective” or “Success” or “Outcome”
05	Moderating Factors	“Moderator,” “Moderators”
06	Mediating Factors	“Mediators,” “Mediator”
07	Suicide	“SI,” “Suicidal Risk,” “Suicidal Ideation,” “Suicide Attempt,” “History of Suicide Attempt”
10	Group Interpersonal Therapy	“Group Therapy,” “IPT-AG,” “Group Counseling,” “Group Intervention”

APPENDIX B

Tables and Figures

Table B1

Included Studies (IPT-A and Selected Adaptations) – Study Design and Participant Information (Listed in Chronological Order)

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Mufson, Moreau, Weissman, Wickramaratne, Martin, & Samoilov	1994	United States	Children's Anxiety and Depression Clinic at Columbian Presbyterian Medical Center or The Research Clinic at New York State Psychiatric Institute	<u>Phase I</u> : open-ended single cases <u>Phase II</u> : 12-week open clinical trial (repeated measures)	2	IPT-A (Individual)	<u>Phase I and II</u> : no control or comparison group	19 Phase I N=5 Phase II: N=14	<u>Phase I</u> : 15.8 <u>Phase II</u> : 15.5 (males) & 14 (females)	<u>Phase I</u> : all female <u>Phase II</u> : 85.7% female	Unknown	<u>Phase I</u> : NA <u>Phase II</u> : Hispanic: 78.6%; African American: 21.4%	<u>Phase I</u> : Major Depression (80%) Depression NOS (20%) <u>Phase II</u> : Major Depression (86%); Dysthymic (7%); NOS / bereavement (7%)	<u>Phase I</u> : NA <u>Phase II</u> : Social Phobia (21%); Separation anxiety (14%)
Mufson & Fairbanks	1996	United States	New York City	One-year follow-up	2	IPT-A (Individual)	No control or comparison group	10	17.5	Female: 100%		Latina: 70% African American: 30%	No depression diagnosis (90%) MDD and Dysthymia (10%)	None reported
Mufson, Weissman, Moreau, & Garfinkel	1999	United States	NYC Clinic	RCT	1	IPT-A (Individual)	Clinical monitoring (seen monthly for 30-minute sessions with an option of 2 sessions in one month)	48	15.8	Female: 73% Male: 17%	Low	Hispanic: 70.9%	Major Depression	Dysthymic (21%); Any anxiety disorder (88%); Current suicidal ideation (42.5%) Hx of suicidal attempt (27.5%)

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Rosselló & Bernal	1999	Puerto Rico	Centro Universitario de Servicios y Estudios Psicológicos (University Center for Psychological Services and Research) at the University of Puerto Rico	Randomized Control Trial (pre-post/ 3-month follow up)	1	IPT-A (Individual / Adapted)	Waitlist (WL) *CBT	71	14.7	Female: 54% Male: 46%	Unknown	Puerto-Rican (ethnic minorities): 100%	<i>Double Depression:</i> IPT (30%); CBT (23%); WL (24%) <i>MDD only:</i> IPT (3%); CBT (13%); WL (29%); <i>Dysthymia only</i> = 0.	Not assessed
Santor & Kusumakar	2001	Canada	Child and Adolescent Mental Health Program at the Isaac Walter Killiam Grace Health Centre	Single Group Pretest-Posttest (Open Trial)	2	IPT-A (Individual)	No control	25	16.2	Female: 92% Male: 8%	Middle	Not given	Moderate to Severe Depression	60% of IPT condition had comorbidity including: dysthymia, PTSD, anorexia, GAD, conduct disorder, social phobia
Mufson, Dorta, Wickramaratne, Nomura, Olsson, & Weissman	2004	United States	Five school-based health clinics in New York	Randomized Control Trial	1	IPT-A (Individual)	Treatment as Usual (TAU): Supportive counseling	63	15.1	Female: 84% Male: 16%	Low	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	<i>Major Depression:</i> IPT (52.9%), TAU (48.3%); <i>Dysthymia:</i> IPT (14.7%), TAU (20.7%); <i>Double Depression:</i> IPT (5.9%), TAU (6.9%); <i>NOS:</i> IPT (11.8%), TAU (10.3%); <i>Adjustment Disorder:</i> IPT (14.8%), TAU (13.8%)	Current suicidal ideation (33.5%) Hx of suicide attempt (11%)

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Young, Mufson, & Davies	2006	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	3	IPT-A (Individual)	Treatment as Usual (TAU): Supportive counseling	63	15.9	Female: 84% Male: 16%	Low	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	See (Mufson, Dorta, Wickramaratne, et al., 2004)	See (Mufson, Dorta, Wickramaratne, et al., 2004)
Bolton, Bass, Betancourt, Speelman, Onyango, Clougherty, Neugebauer, Murray, & Verdeli	2007	Northern Uganda	Two IDP camps near the town of Gulu, Northern Uganda	Randomized Control Trial	1	IPT-G (Group)	Waitlist control or Creative Play / Recreation	304	14.94	Female: 57% Male: 43%	Low	Acholi: 100%	Scored above a predetermined threshold of depression symptom severity based on the Acholi Psychosocial Assessment Instrument (APAI) Depression Problems Subscale and reported some functional impairment over the previous month	-
Tang, Jou, Ko, Huang, & Yen	2009	Taiwan	A junior and a senior school, located in Kaohsiung City in southern Taiwan	Randomized Control Trial	1	IPT-A-IN (Suicidal risk)	Treatment as Usual (supportive / psychoeducation)	73	15.26	Female: 66% Male: 34%	-	Taiwanese: 100%	Moderate-severe depression (BDI score > 19); most of the present participants were not depressed enough to be diagnosed with major depressive disorder	Suicide ideation or previous suicide attempt; Moderate-severe anxiety; Significant hopelessness
Gunlicks-Stoessel, Mufson, Jekal, & Turner	2010	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	3	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	14.67	Female: 84% Male: 16%	Low	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	See Mufson, Dorta, Wickramaratne, et al. (2004)	See Mufson, Dorta, Wickramaratne, et al. (2004)

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Gunlicks-Stoessel & Mufson	2011	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	3	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	14.7	Female: 84% Male: 16%	Low	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	See Mufson, Dorta, Wickramaratne, et al. (2004)	See Mufson, Dorta, Wickramaratne, et al. (2004)
Betancourt, Newnham, Brennan, Verdeli, Borisova, Neugebauer, Bass, & Bolton	2012	Northern Uganda	Two IDP camps near the town of Gulu, Northern Uganda	Additional Analysis (Bolton et al., 2007)	3	IPT-G (Group)	Waitlist control or Creative Play/Recreation	304	14.94	Female: 57% Male: 43%	Low	Acholi: 100%	See Bolton et al. (2007)	See Bolton et al. (2007)
Roselló, Bernal, & Rivera-Medina	2012	Puerto Rico	-	Randomized Control Trial	1	IPT-A (Individual) IPT-G (Group)	*CBT (Individual & Group Adaptations):	112	14.52	Female: 55.4% Male: 44.6%	Low (1.9%); Middle to low (32.1%); Middle (58.5%); Middle to high (7.5%)	Puerto-Rican (ethnic minorities): 100%	MDD (DSM-III-R): (n=74, 66%) or were deemed by a clinical interviewer to be impaired; A score of 13 or higher on the CDI (n=38, 34%)	-
Gunlicks-Stoessel, Mufson, Cullen, & Klimes-Dougan	2013	United States	Health clinics in New York City	Randomized Trial (Pilot Study)	3	IPT-A (individual) IPT-AP (Greater parent involvement)	No control: IPT-A IPT-AP	15	15.2	Female: 86.7% Male: 13.3%	Low	White Latino: 86% African American: 7% Bi-racial Latino: 7%	MDD (73%) MDD and Dysthymic (7%) NOS (20%)	Social phobia (13%) Specific phobia (7%)

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Mufson, Yanes-Lukin, Gunlicks-Stoessel, & Wickramaratne	2014	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	3	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	15.9 / 14.6	Female: 84% Male: 16%	Low	<u>Ethnic Matching Analyses:</u> Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5% <u>Acculturation Analyses:</u> Born US: (N 36; 72%), Puerto Rico (N 4; 8.0%), Dominican Republic (N 8; 16%), and Central or South America (N 2; 4%).	See Mufson, Dorta, Wickramaratne, et al. (2004)	See Mufson, Dorta, Wickramaratne, et al. (2004)
Mufson, Yanes-Lukin, & Anderson	2015	United States	Primary care setting, New York City	Single Group Pretest-Posttest (Pilot Open Clinical Trial)	2	BIPT-A (Brief)	No control: All participants received BIPT-A	10	15.3	Female: 80% Male: 20%	-	Hispanic: 100%	MDD DSM IV (80%) NOS (20%)	GAD (10%)
O'Shea, Spence, & Donovan	2015	Australia	School of Psychology Clinic, University of Queensland or in the counseling services facilities of a state high school	Randomized Trial	2	IPT-A (individual) IPT-G (Group)	No control: IPT-A v IPT-G	39	15.33	Female: 85% Male: 15%	Low-Middle	Caucasian: 97% Aboriginal: N=1 (3%) Seventy-six percent of the sample was born in Australia (race/ethnicity not otherwise specified)	MDD (100%)	One or more anxiety disorder(s) (41%); alcohol or substance abuse (23%); oppositional defiant or conduct disorder (5%); attention deficit hyperactivity disorder (8%); bulimia nervosa (5%)

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Gunlicks-Stoessel & Mufson	2016	United States	New York City	Randomized Trial Pilot Study – (uses same population Gunlicks-Stoessel, Mufson, Cullen, & Klimes-Dougan)	2	IPT-A (individual) IPT-A- AP (Greater parent involvement)	IPT-A v IPT-AP	15	15.2	Female: 86.67% Male: 13.33%	Low	White Latino: 86% African American: 7% Bi-racial Latino	MDD, dysthymic disorder, depressive disorder NOS	Social phobia (13%) Specific phobia
Spence, O'Shea, & Donovan	2016	Australia	School of Psychology Clinic, University of Queensland or in the counseling services facilities of a state high school	Additional Analysis (O'Shea et al., 2015)	3	IPT-A (individual) IPT-G (Group)	No control: IPT-A v IPT-G	39	15.33	Male: 15%	Low-Middle	Caucasian: 97% Aboriginal: N=1 (3%)	MDD (100%)	One or more anxiety disorder(s) (41%); alcohol or substance abuse (23%); oppositional defiant or conduct disorder (5%); attention deficit hyperactivity disorder (8%); bulimia nervosa (5%)
Gunlicks-Stoessel, Mufson, Westervelt, Almirall, & Murphy	2016	United States		Randomized Trial (Pilot SMART)	3	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	32	14.9	Female: 75% Male: 25%	Middle-High	American Indian/Alaskan Native: 9.4%, Caucasian: 84.4% Biracial: African American/Caucasian: 6.3%	MDD (93.8%), MDD and dysthymic disorder (3.1%) Depressive disorder not otherwise specified (NOS) 3.1% mean severity = moderate	GAD (18.8%); Social phobia (21.9%), Specific phobia, and Oppositional Defiant Disorder (6.3%) Attention Deficit Hyperactivity Disorder (9.4%)
Reyes-Portillo, McGlinchey, Yanes-Lukin, Turner, & Mufson	2017	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	3	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	50	14.58	Female: 86% Male: 14%	Low	Latino: 100%	-	-

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
McGlinchey, Reyes-Portillo, Turner, & Mufson	2017	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	3	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	15.1	Female: 84% Male: 16%	Low	Hispanic: 71%	See Mufson, Dorta, Wickramaratne, et al. (2004)	See Mufson, Dorta, Wickramaratne, et al. (2004)
Thurman, Nice, Taylor, & Luckett	2017	South Africa	57 intervention drop-in centers based on area of residence within 84 villages in two contiguous rural districts of the eastern cape province	Randomized Control Trial	1	IPT-G (Group)	- IPTG only - Vhutshilo only - IPTG & Vhutshilo sequentially	489	15.5	Female: 50% Male: 50%	-	African: 100% (Sub Saharan)	<i>IPTG</i> <i>High Depressive Symptoms: (52%)</i> <i>Low Depressive Symptoms (48%)</i>	-
Mufson, Rynn, Yanes-Lukin, Choo, Soren, Stewart, & Wall	2018	United States	NYC: 4 pediatric clinics	Randomized Control Trial (Pilot Study)	1	SCRIPT-A (stepped care model)	Enhanced Treatment as Usual (E-TAU)	48	15.9	Female: 79% Male: 21%	Low (77%)	Latino: 96% African American: 4%	<i>Major Depressive Disorder:</i> SCRIPT-A (41%); E-TAU (27%) <i>NOS:</i> (19%); E-TAU (13%)	<i>Current SI or Hx of attempt:</i> SCRIPT-A (13%); E-TAU (8%) <i>NSSI (lifetime or past month):</i> SCRIPT-A 10%; E-TAU (8%)
Gunlicks-Stoessel, Mufson, Bernstein, Westervelt, Reigstad, Klimes-Dougan, Cullen, Murray, & Vock	2019	United States	The site's Ambulatory Research Center	Randomized Trial (Pilot SMART)	3	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	40	14.8	Female: 77.5% Male: 22.5%	High	Latino: 10% (includes Black/African American and White Latinos); Caucasian: 80.0%; Asian: 7.5%; American Indian/Alaska Native: 7.5%; Biracial: 5.0%	MDD: 95% Dysthymic: 5% NOS: 2.5%	GAD: 22.5% Social Anxiety: 22.5% Panic Disorder: 2.5% Specific Phobia: 5% Anxiety NOS: 2.5% ODD: 5% ADHD: 7.5%

All Authors	Year	Country	Setting	Study Design	RQ	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	SES	Ethnicity	Depression Diagnoses of Participants in Sample	Baseline Comorbidities
Gunlicks-Stoessel, Westervelt, Reigstad, Mufson, & Lee	2019	United States	The site's Ambulatory Research Center	Additional Analysis (Gunlicks-Stoessel, Mufson, Bernstein et al., 2019)	3	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	40	14.8	Female: 77.5% Male: 22.5%	High	Latino: 10% (includes Black/African American and White Latinos); Caucasian: 80.0%; Asian: 7.5%; American Indian/Alaska Native: 7.5%; Biracial: 5.0%	MDD: 95% Dysthymic: 5% NOS: 2.5%	GAD: 22.5% Social Anxiety: 22.5% Panic Disorder: 2.5% Specific Phobia: 5% Anxiety NOS: 2.5% ODD: 5% ADHD: 7.5%
Toth, Handley, Manly, Sturm, Adams, Demeusy, & Cicchetti	2020	United States	Flexible delivery site: homes, community settings, clinic, and schools	Randomized Control Trial	2	IPT-A (individual)	Enhanced Community Standard (ECS)	120	13.96	Female: 100%	Low	African American: 65.0% Caucasian: 20.8% Other 14.2% LatinX 14.2%	Major Depression (18.3%); Minor Depression (25.8%); Dysthymia (5%); Subsyndromal (50.8%).	Anxiety (10%); Hx of sexual abuse (12.5%); Self-harm (20.8%); Suicide ideation (47.5%); PTSD (32.5%).
Zhou, Arend, Mufson, & Gunlicks-Stoessel	2021	United States	The site's Ambulatory Research Center	Additional Analysis (Gunlicks-Stoessel, Mufson, Bernstein et al., 2019)	3	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	40	14.8	Female: 77.5% Male: 22.5%	High	Latino: 10% (includes Black/African American and White Latinos); Caucasian: 80.0%; Asian: 7.5%; American Indian/Alaska Native: 7.5%; Biracial: 5.0%	MDD: 95% Dysthymic: 5% NOS: 2.5%	GAD: 22.5% Social Anxiety: 22.5% Panic Disorder: 2.5% Specific Phobia: 5% Anxiety NOS: 2.5% ODD: 5% ADHD: 7.5%

Note. **HIGHLIGHTED AREAS:** Denotes Additional Analyses from an original study.

CONTROL COMAPRISON KEY: CM = Clinical monitoring (seen monthly for 30-minute sessions with an option of 2 sessions in one month); CP = Creative Play/Recreation; ECS = Enhanced Community Standard; E-TAU = Enhanced Treatment as Usual; TAU = Treatment as usual (supportive counseling/psychoeducation); WLC = Waitlist control; WL = Waitlist; V = Vhutshilo.

DEPRESSION MEASURES KEY: APAI = Acholi Psychosocial Assessment Instrument; BAI = Beck Anxiety Inventory; BDI = Beck Depression Inventory; BDI-Y = Beck Depression Inventory for Youth; BDI II = Beck Depression Inventory, second edition; BHS (2) = Beck Hopelessness Scale; BSS = Beck Scale for Suicide Ideation; CBCL-A/CBCL-P = The Child Behavior Checklist; CDI = Children's Depression Inventory; CDRS-R = Children Depression Rating Scale - Revised; CES-DC = Center for Epidemiological Studies. Depression Scale for Children; CGI = Clinical Global Impressions Scale; CTQ = The Childhood Trauma Questionnaire; C-GAS = Global Assessment Scale for Children; DISC-2.1 = Children's Depression Inventory, Diagnostic Interview Schedule for Children; DISC 2.3 = The Diagnostic Interview Schedule for Children Version 2.3; DPS = Diagnostic Interview Schedule for Children Predictive Scales; FEICS = Family Emotional Involvement and Criticism Scale; HRSD = Hamilton Rating Scale for Depression; KSADS-E = Schedule for Affective Disorders and Schizophrenia for School-Age Children-Epidemiologic Version; KSADS-PL = Kiddie Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version; PHCSCS = Piers-Harris Children's Self-Concept Scale; PHQ-9 = Patient Health Questionnaire; SASCA = Social Adjustment Scale for Children and Adolescents; SAS-SR = Social Adjustment Scale-Self-Report; SCID-I = Structured Clinical Interview; SCL-90 = Symptom Checklist; UCLA-PTSD Reaction Index.

*CBT Individual & Group Adaptations adapted by Muñoz and Miranda (1986); Rossello & Bernal (1999, 2005); CBT modeled from cognitive-behavioral model group intervention for depressed adults by Muñoz and Miranda (1986); Bernal, Bonilla, & Bellido (1995).

Table B2*RQ1: Quantitative Results From Randomized Controlled Trials (1999–2020)*

Author/s	Year	Country	IPT-A Intervention	Control / Comparison	N	Mean Age	Gender	Ethnicity	DEP Measure	Mean Score Pre-Treatment/Baseline	Mean Score Post-Treatment	P-value	Effect Size	Mean Score Follow Up	Main Finding	QA Score
Mufson, Weissman, Moreau, & Garfinkel	1999	United States	IPT-A (Individual)	CM	48	15.8	Female: 73% Male: 17%	Hispanic: 70.9%	BDI HRSD	18.8 v 22.8 (CM) 19.2 v 18.7 (CM)	5.9 v 12.9 (CM) 6.3 v 11.8 (CM)	0.05 0.02	-	-	80% of participants reached recovery criteria on the BDI (score <10); 84% of participants in the IPT group reached recovery criteria on the HRSD (score <6);	Excellent
Rosselló & Bernal	1999	Puerto Rico	IPT-A (Individual)	WL *CBT	71	14.7	Female: 54% Male: 46%	Puerto Rican: 100%	CDI	21.21 v 20.13 (WL) 21.21 v 20.12 (CBT) 20.12 v 20.13 (CBT v WL)	10.79 v 15.83 (WL) 10.79 v 13.28 (CBT) 13.28 v 15.83 (CBT v WL)	<.002 No sig. <.015	**0.73 - **0.43	13.75 - 8.90 + 3 months	Participants in IPT, $F(1, 33) = 11.62, p < .002$, and CBT, $F(1, 37) = 2.58, p < .015$, showed significantly lower depression scores when compared with participants in the wait-list control condition.	Exemplary
Mufson, Dorta, Wickramaratne, et al.	2004	United States	IPT-A (Individual)	TAU	63	15.1	Female: 84% Male: 16%	Hispanic: 71%	BDI HRSD	20.8 v 21.8 (TAU) 18.9 v 18.3 v (TAU)	8.4 v 12.3 (TAU) 8.7 v 12.8 (TAU)	0.14 0.04	0.37 0.5	- Comparable to week 12	Adolescents treated with IPT-A compared with TAU showed greater symptom reduction and improvement in overall functioning.	Exemplary
Bolton et al.	2007	Northern Uganda	IPT-G (Group)	WLC CP	304	14.94	Female: 57% Male: 43%	Acholi: 100%	APAI	43.5 v 44.2	27.8 v 40.6	0.02	-	-	Girls receiving IPT-G showed substantial and significant improvement in depression symptoms compared with controls (12.61 points; 95% CI, 2.09-23.14). Improvement among boys was not statistically significant (5.72 points; 95% CI, -1.86 to 13.30).	Strong

Author/s	Year	Country	IPT-A Intervention	Control / Comparison	N	Mean Age	Gender	Ethnicity	DEP Measure	Mean Score Pre-Treatment/Baseline	Mean Score Post-Treatment	P-value	Effect Size	Mean Score Follow Up	Main Finding	QA Score
Tang et al.	2009	Taiwan	IPT-A-IN (Suicidal risk)	TAU	73	15.26	Female: 66% Male: 34%	Taiwanese: 100%	BDI-II	32.66 v 32.33 (TAU)	19.97 v 31.58 (TAU)	<.001	-	-	IPT-A-IN group had lower post-intervention severity of depression, suicidal ideation, anxiety and hopelessness than the TAU group.	Excellent
Rosselló et al.	2012	Puerto Rico	IPT-A (Individual) IPT-G (Group)	*CBT	112	14.52	Female: 55.4% Male: 44.6%	Puerto Rican: 100% (Ethnic minorities)	CDI	21.52 v 22.62 (CBT)	14.62 v 12.04 (CBT) Adjusted Means: IPT = 14.84 CBT = 11.72	0.016 CBT	.18 (IND versus Group)	-	CBT produced significantly greater decreases in depressive symptoms as measured by the CDI [F(1, 107) = 5.96, p = .016] in comparison to IPT.	Exemplary
Thurman et al.	2017	South Africa	IPT-G (Group)	Control IPTG	489	15.5	Female: 50% Male: 50%	Sub Saharan African: 100%	CES-DC	16.03 v 14.67 (Control)	16.46 v 15.63 (control)	No sig	-	17.03 v 16.60. + 1 year after treatment	Results from this trial did not suggest that a 16-week IPTG intervention was effective.	Exemplary
Mulson, Rynn, Yanes-Lukin et al.	2018	United States	SCRIPT-A (stepped care model)	E-TAU	48	15.9	Female: 79% Male 21%	96% Latino 4% AA	CDRS-R PHQ-9	50.69 v 52.53 (E-TAU) 14.79 v 14.42 (E-TAU)	30.02 v 33.41 (E-TAU) PHQ-9: ? v ? (E-TAU)	0.4	0.35	-	Moderate to large effect size differences between SCRIPT-A and E-TAU suggesting greater reduction of depression symptoms.	Excellent
Toth et al.	2020	United States	IPT-A (individual)	ECS	120	13.96	Female: 100%	AA: 65.0% C: 20.8% Other: 14.2% LatinX: 14.2%	BDI-Y	13.47 v 15.564(ECS)	9.19 v 11.92 (ECS)	0.076	-	-	Marginally significantly lower depressive symptoms at post-intervention compared to those assigned to ECS.	Exemplary

Note. IPT INTERVENTION KEY: IPT-A = Interpersonal Psychotherapy for Depressed Adolescents (INDIVIDUAL FORMAT); IPT-G = Interpersonal Psychotherapy for Depressed Adolescents (GROUP FORMAT); BIPT-A = Interpersonal Psychotherapy for Depressed Adolescents (BRIEF FORMAT); IPT-AP = Interpersonal Psychotherapy for Depressed Adolescents (with GREATER and MORE STRUCTURED PARENT INVOLVEMENT in treatment); **CONTROL COMAPRISON KEY:** CM = Clinical monitoring (seen monthly for 30-minute sessions with an option of 2 sessions in one month); CP = Creative Play/Recreation; ECS = Enhanced Community Standard; E-TAU = Enhanced Treatment as Usual; TAU = Treatment as usual (supportive counseling/psychoeducation); WLC = Waitlist control; WL = Waitlist; V = Vhutshilo.; **DEPRESSION MEASURES KEY:** APAI = Acholi Psychosocial Assessment Instrument; BDI-Y = Beck Depression Inventory for Youth; BDI II = Beck Depression Inventory, second edition; CDI = Children's Depression Inventory; CDRS-R = Children Depression Rating Scale - Revised; CES-DC = Center for Epidemiologic Studies Depression Scale for Children; HRSD = Hamilton Rating Scale for Depression; PHQ-9 = Patient Health Questionnaire; **EFFECT SIZE:** **moderate effect size; **ETHNCIITY KEY:** AA = African American; C = Caucasian; *CBT Individual & Group Adaptations adapted by Muñoz and Miranda (1986); Rossello' & Bernal (1999, 2005); CBT modeled from cognitive-behavioral model group intervention for depressed adults by Muñoz and Miranda (1986); Bernal, Bonilla, & Bellido (1995).

Table B3*RQ2: Reported Secondary Outcomes From Effectiveness Studies (Across all Studies RQ1/2)*

				↓	↓	↑	↑	↑	↑			
AUTHOR/S	STUDY DESIGN	YEAR	TYPE OF IPT-A	Depression Symptoms	Depression Severity	Social Functioning	Global Functioning	Family Interpersonal Functioning	Peer Interpersonal Functioning	High Treatment Satisfaction	Variety of Clinicians Effective	Transportability
Mufson, Moreau, Weissman et al.	Phase I/Phase II	1994	IPT-A (Individual)	X	X	X	X	X	X			
Mufson & Fairbanks	1-year follow-up	1996	IPT-A (Individual)	X	X	X	X	X	X	X		
Mufson, Weissman, Moreau, & Garfinkel	Randomized Control Trial	1999	IPT-A (Individual)	X	X	X	X	X	X			
Roselló & Bernal	Randomized Control Trial	1999	IPT-A (Individual / Adapted)	X		X		X				
Santor & Kusumakar	Single Group Pretest-Posttest (Open Trial)	2001	IPT-A (Individual)	X	X		X			X	X	
Mufson, Dorta, Wickramaratne, et al.	Randomized Control Trial	2004	IPT-A (Individual)	X	X	X	X				X	X
Bolton et al.	Randomized Control Trial	2007	IPT-G (Group)	X							X	X
Tang et al.	Randomized Control Trial	2009	IPT-A-IN (Suicidal risk)	X	X						X	X
Roselló et al.	Randomized Control Trial	2012	IPT-A (Individual) IPT-G (Group)	X								

				↓	↓	↑	↑	↑	↑			
AUTHOR/S	STUDY DESIGN	YEAR	TYPE OF IPT-A	Depression Symptoms	Depression Severity	Social Functioning	Global Functioning	Family Interpersonal Functioning	Peer Interpersonal Functioning	High Treatment Satisfaction	Variety of Clinicians Effective	Transportability
Mufson et al.	Single Group Pretest-Posttest (Pilot Open Clinical Trial)	2015	BIPT-A (individual)	X	X	X	X					
O'Shea et al.	Randomized Trial	2015	IPT-A IPT-AG (Group)	X		X	X			X		X
Gunlicks-Stoessel & Mufson	Randomized Trial (Pilot Study)	2016	IPT-A IPT-AP	X	X					X		
Thurman et al.	Randomized Control Trial	2017	IPT-G (Group)									X
Mufson et al.	Randomized Control Trial (Pilot Study)	2018	SCRIPT-A	X	X						X	X

Note. IPT-A = Interpersonal Psychotherapy for Depressed Adolescents (INDIVIDUAL FORMAT); IPT-G = Interpersonal Psychotherapy for Depressed Adolescents (GROUP FORMAT); BIPT-A = Interpersonal Psychotherapy for Depressed Adolescents (BRIEF FORMAT); SCRIPT-A = Interpersonal Psychotherapy for Depressed Adolescents (Stepped Care Model FORMAT); IPT-AP = Interpersonal Psychotherapy for Depressed Adolescents (with GREATER and MORE STRUCTURED PARENT INVOLVEMENT in treatment); IPT-A-IN = Interpersonal Psychotherapy for Depressed Adolescents (depressed adolescents with SUICIDAL RISK).

Table B4

RQ2: Effectiveness Studies/Secondary Outcomes From Quantitative Studies of IPT-A and Adaptations (Not Included in RQ1)

Author/s	Year	Country	Setting	Study Design	IPT-A Intervention	Control Group/s Comparison Group/s	Sample Size	Mean Age	Gender	Ethnicity	DEP Measure	P-value	Qualitative Outcomes	QA Score
Mufson, Moreau, Weissman et al.	1994	United States	Children's Anxiety and Depression Clinic at Columbian Presbyterian Medical Center or The Research Clinic at New York State Psychiatric Institute	Phase I: open-ended single cases Phase II: 12-week open clinical trial (repeated measures)	IPT-A (Individual)	Phase I and II: No control or comparison group	Phase I: N=5 Phase II: N=14 N = 19	Phase I: N = 15.8 Phase II: 15.5 for males and 14 for females	Phase I: all female Phase II: 85.7% female	Phase I: NA Phase II: Hispanic: 78.6%; African American: 21.4%	BDI HRSD	<.001 <.001	Phase I: Decrease in depression Phase II: Significant overall improvement in social adjustment; Improved functioning in role areas of family and friends; decrease in physical and psychological distress	Strong
Mufson & Fairbanks	1996	United States	NYC	One-year follow-up	IPT-A (Individual)	No control or comparison group	10	17.5	Female: 100%	Latina: 70% African American: 30%	BDI	<.001	Maintenance from Phase II in areas of overall adjustment, social functioning, and decrease in depressive symptoms no trouble with the law, pregnancies, or school dropout.	Good
Santor & Kusumakar	2001	Canada	Child and Adolescent Mental Health Program at the Isaac Walter Killiam Grace Health Centre.	Single Group Pretest-Posttest (Open Trial)	IPT-A (Individual)	No control or comparison group	25	16.2	Female: 92% Male: 8%	Not given	BDI HRSD	<.0001 <.0001	Feasibility, acceptability and treatment satisfaction:	Strong
Mufson et al.	2015	United States	NYC	Single Group Pretest-Posttest (Pilot Open Clinical Trial)	BIPT-A (Brief)	No control: All participants received BIPT-A	10	15.3	Female: 80% Male: 20%	Hispanic: 100%	BDI-II CDRS-R CGI	.004 .015 .003	Feasibility, acceptability and treatment satisfaction:	Strong

Author/s	Year	Country	Setting	Study Design	IPT-A Intervention	Control Group/s Comparison Group/s	Sample Size	Mean Age	Gender	Ethnicity	DEP Measure	P-value	Qualitative Outcomes	QA Score
O'Shea et al.	2015	Australia	School of Psychology Clinic, University of Queensland or in the counseling services facilities of a State High School.	Randomized Trial	IPT-A (individual) IPT-G (Group)	No control: IPT-A v IPT-G	39	15.33	Female: 85% Male: 15%	Caucasian: 97% Aboriginal: N=1 (3%) Seventy-six percent of the sample was born in Australia (race/ethnicity not otherwise specified)	BDI-II	<.001	High rates of participation depression severity, anxiety, number of comorbid diagnoses, decreases in self-reported internalizing problems, and improvements in global functioning were all reported	Strong
Gunlicks-Stoessel & Mufson	2016	United States	NYC	Randomized Trial (Pilot Study) Additional Analysis (Gunlicks-Stoessel, Mufson, Cullen, & Kimes-Dougan, 2013)	IPT-A (individual) IPT-A- AP	No control: IPT-A v IPT-AP	15	15.2	Female: 86.67% Male: 13.33%	White Latino: 86% African American: 7% Bi-racial Latino: 7%	CDRS-R	=.000	High treatment satisfaction, acceptability, feasibility, improvements in depressive symptoms, general functioning, and family functioning; Improvement in adolescent perceptions of the father-adolescent relationship, and mothers' perceptions of their relationship with their children.	Strong

Note. IPT INTERVENTION KEY: IPT-A = Interpersonal Psychotherapy for Depressed Adolescents (INDIVIDUAL FORMAT); IPT-G = Interpersonal Psychotherapy for Depressed Adolescents (GROUP FORMAT); BIPT-A = Interpersonal Psychotherapy for Depressed Adolescents (BRIEF FORMAT); IPT-AP = Interpersonal Psychotherapy for Depressed Adolescents (with GREATER and MORE STRUCTURED PARENT INVOLVEMENT in treatment);

DEPRESSION KEY: BDI = Beck Depression Inventory; BDI II = Beck Depression Inventory, second edition; CDRS-R = Children Depression Rating Scale - Revised; CGI = Clinical Global Impressions Scale; HRSD = Hamilton Rating Scale for Depression.

HIGHLIGHTED AREAS: Additional Analysis

Table B5

RQ3 Studies Investigating Variables of Interest (Potential Moderators and Mediators of IPT-A and Variations) Arranged by Study Designs/Associated Studies

Author/s	Year	Country	Setting	Study Design	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	Ethnicity	Variables of Interest explored	QA Score
Young, Mufson, & Davies	2006	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	IPT-A (Individual)	Treatment as Usual (TAU): Supportive counseling	63	15.9	Female: 84% Male: 16%	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	Comorbid anxiety	Good
Gunlicks-Stoessel, Mufson, Jekal, & Turner	2010	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	14.67	Female: 84% Male: 16%	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	Perceived interpersonal functioning	Excellent
Gunlicks-Stoessel & Mufson	2011	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	14.7	Female: 84% Male: 16%	Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5%	Reduction of depressive symptoms in early treatment	Strong
Mufson et al.	2014	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	15.9 / 14.6	Female: 84% Male: 16%	<u>Ethnic Matching Analyses:</u> Latino: 74.6% African American: 14.3% Asian American: 1.6% Other: 9.5% <u>Acculturation Analyses:</u> Born US: (N 36; 72%), Puerto Rico (N 4; 8.0%), Dominican Republic (N 8; 16%), and Central or South America (N 2; 4%).	Ethnic Matching Acculturation Country of birth Length of residence in US	Excellent
Reyes-Portillo et al.	2017	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	50	14.58	Female: 86% Male: 14%	Latino: 100%	Peer and Family Interpersonal functioning	Excellent
McGlinchey et al.	2017	United States	Five school-based health clinics in New York	Additional Analysis (Mufson, Dorta, Wickramaratne, et al., 2004)	IPT-A (individual)	Treatment as Usual (TAU): Supportive counseling	63	15.1	Female: 84% Male: 16%	Hispanic: 71%	Sleep disturbance Interpersonal functioning	Excellent

Author/s	Year	Country	Setting	Study Design	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	Ethnicity	Variables of Interest explored	QA Score
Betancourt et al.	2012	Northern Uganda	The RCT was conducted in two IDP camps near the town of Gulu, northern Uganda.	Additional Analysis (Bolton et al., 2007)	IPT-G (Group)	Waitlist control or Creative Play/Recreation	304	14.94	Female: 57% Male: 43%	Acholi	Abduction History Gender	Strong
Gunlicks-Stoessel et al.	2013	United States	Health Clinics in NYC	Randomized Trial (Pilot Study)	IPT-A (individual) IPT-AP	No control: IPT-A v IPT-AP	15	15.2	Female: 86.7% Male: 13	White Latino: 86% African American: 7% Bi-racial Latino: 7%	Hypothalamic Pituitary Adrenal (HPA) axis, a neurobiological stress system	Excellent
Spence et al.	2016	Australia	Treatment took place at either the School of Psychology Clinic, University of Queensland or in the counseling services facilities of a State High School.	Additional Analysis (O'Sheat et al., 2015)	IPT-A (individual) IPT-AG	No control: IPT-A v IPT-AG	39	15.33	Female: 85% Male: 15%	Caucasian: 97% Aboriginal: N=1 (3%) Seventy-six percent of the sample was born in Australia (race/ethnicity not otherwise specified)	Interpersonal Functioning Attachment Style: increase in secure attachment and decrease in insecure attachment Social Skills (judged by parent) Social Competence with Peers Reductions in conflict with Mother (youth report)	Strong
Gunlicks-Stoessel et al.	2016	United States		Randomized Trial (Pilot SMART)	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	32	14.9	Female: 75% Male: 25%	American Indian/Alaskan Native: 9.4% Caucasian: 84.4% Biracial: African American/Caucasian	Time-point (week 4 or 8) Medication (Fluoxetine) Increased IPT-A sessions Maintenance of IPT-A sessions	Exemplary
Gunlicks-Stoessel, Mufson, et al.	2019	United States	The site's Ambulatory Research Center	Randomized Trial (SMART)	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	40	14.8	Female: 77.5% Male: 22.5%	Latino: 10% (includes Black/African American and White Latinos); Caucasian: 80.0%; Asian: 7.5%; American Indian/Alaska Native: 7.5%; Biracial: 5.0%	Time-point (week 4 or 8) Medication (Fluoxetine) Increased IPT-A sessions Maintenance of IPT-A sessions	Exemplary

Author/s	Year	Country	Setting	Study Design	IPT-A Intervention	Control Group/s Comparison Group/s	N	Mean Age	Gender	Ethnicity	Variables of Interest explored	QA Score
Gunlicks-Stoessel, Westervelt, et al.	2019	United States	The site's Ambulatory Research Center	Additional Analysis (Gunlicks-Stoessel, Mufson, Bernstein et al., 2019)	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	40	14.8	Female: 77.5% Male: 22.5%	As above	Attachment anxiety and avoidance	Excellent
Zhou et al.	2021	United States	The site's Ambulatory Research Center.	Additional Analysis (Gunlicks-Stoessel, Mufson, Bernstein et al., 2019)	IPT-A (individual)	No control: - IPT-A (maintenance) - Increase IPT-A sessions - Administer Fluoxetine	40	14.8	Female: 77.5% Male: 22.5%	As above	Attachment anxiety and avoidance	Excellent
Toth et al.	2020	United States	Flexible delivery site: homes, community settings, clinic, and schools	Randomized Control Trial	IPT-A (individual)	Enhanced Community Standard (ECS)	120	13.96	Female: 100%	65.0% African-American, 20.8% Caucasian, 14.2% identified as "other race," and 14.2% LatinX ethnicity	Child Maltreatment	Exemplary

Table B6*RQ3: Reported Moderators/Variables of Interest Accounting for Effectiveness Outcomes Across IPT-A Interventions*

AUTHOR/S	YEAR	IPT-A TYPE	Comorbid Anxiety	Perceived Interpersonal Dysfunction	Attachment: Avoidance/ Anxiety	Family Interpersonal Functioning	Peer Interpersonal Functioning	Maltreatment: Hx of Sexual Abuse	Abduction HX + Gender w/ War Affected Youth	Critical Decision-Point (week 4)	Ethnic matching Thp-Cit	Acculturation Indices	Sleep Disturbance	HPA Axis
Young, Mufson, & Davies, (Additional analysis; Mufson et al., 2004)	2006	IPT-A (Individual)	X											
Gunlicks-Stoessel et al. (Additional analysis; Mufson et al., 2004)	2010	IPT-A (individual)		X										
Gunlicks-Stoessel & Mufson (Additional analysis; Mufson et al., 2004)	2011	IPT-A (individual)								X				
Betancourt et al. (Additional analysis; Bolton et al., 2007)	2012	IPT-G (Group)							X (mod)					
Gunlicks-Stoessel et al. (Randomized Trial)	2013	IPT-A IPT-AP												X
Mufson et al. (Additional analysis; Mufson et al., 2004)	2014	IPT-A (individual)				X					X	X		
Gunlicks-Stoessel et al. (Randomized trial; Pilot SMART)	2016	IPT-A (individual)								X				
Spence et al. (Additional analysis; O'Shea et al., 2015)	2016	IPT-A IPT-AG			X									
Reyes-Portillo et al. (Additional analysis; Mufson et al., 2004)	2017	IPT-A (individual)				X (med)	X (med)							
McGlinchey et al. (Additional analysis; Mufson et al., 2004)	2017	IPT-A (individual)											X	
Gunlicks-Stoessel, Mufson, et al. (Randomized trial; SMART)	2019	IPT-A (individual)								X				

AUTHOR/S	YEAR	IPT-A TYPE	Comorbid Anxiety	Perceived Interpersonal Dysfunction	Attachment: Avoidance/ Anxiety	Family Interpersonal Functioning	Peer Interpersonal Functioning	Maltreatment: Hx of Sexual Abuse	Abduction HX + Gender w/ War Affected Youth	Critical Decision-Point (week 4)	Ethnic matching Thp-Cit	Acculturation Indices	Sleep Disturbance	HPA Axis
Gunlicks-Stoessel, Westervelt, et al. (Additional analysis; Gunlicks-Stoessel, Mufson, et al.)	2019	IPT-A (individual)			X					X				
Toth et al. (Randomized Control Client)	2020	IPT-A (individual)						X (mod)						
Zhou et al. (Additional analysis; Gunlicks-Stoessel, Mufson, et al.)	2021	IPT-A			X					X				

Note. IPT-A = Interpersonal Psychotherapy for Depressed Adolescents (INDIVIDUAL FORMAT); IPT-G = Interpersonal Psychotherapy for Depressed Adolescents (GROUP FORMAT) SCIPT-A = Interpersonal Psychotherapy for Depressed Adolescents (Stepped Care Model FORMAT).

)

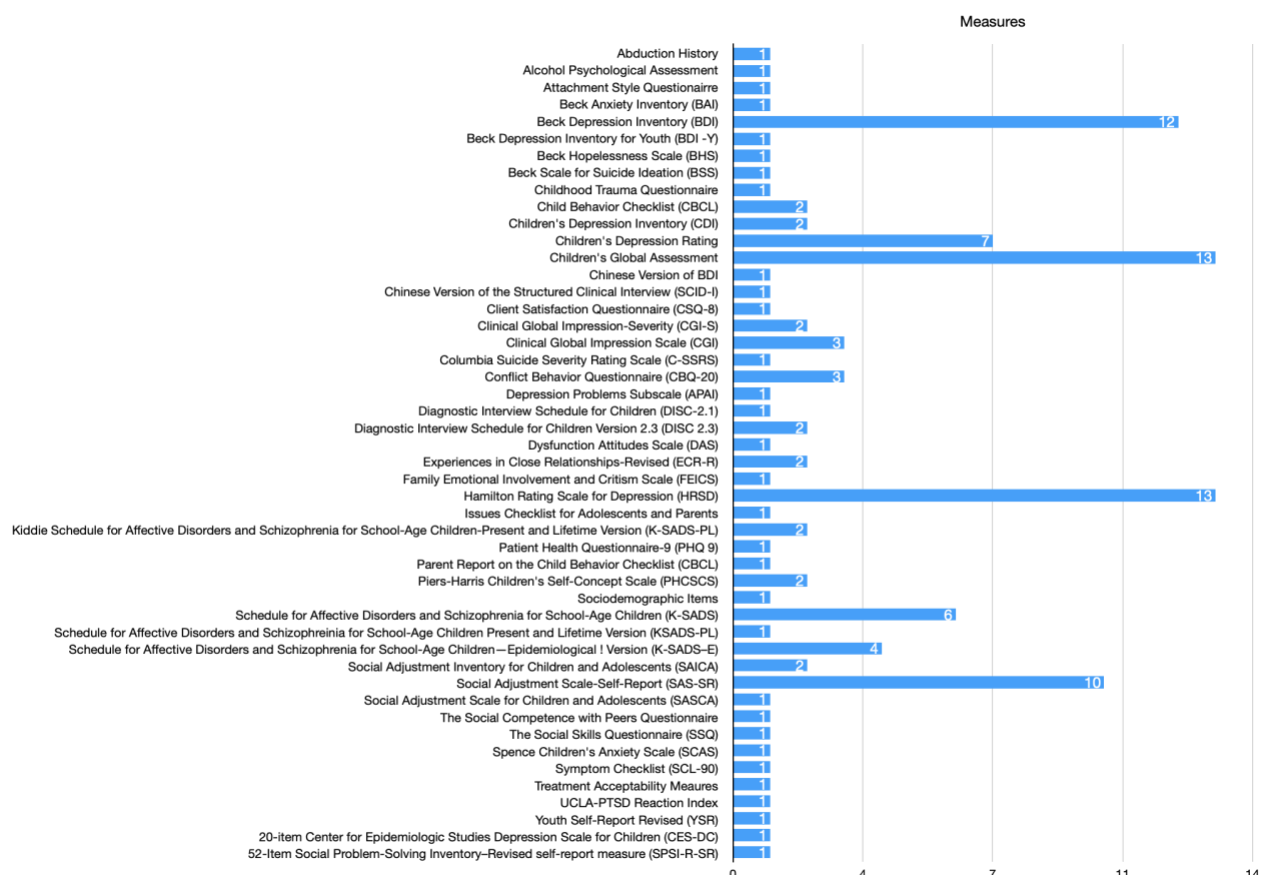
Figure B1*Measures Used Across all Studies*

Figure B2

IPT-A Interventions in Systematic Review

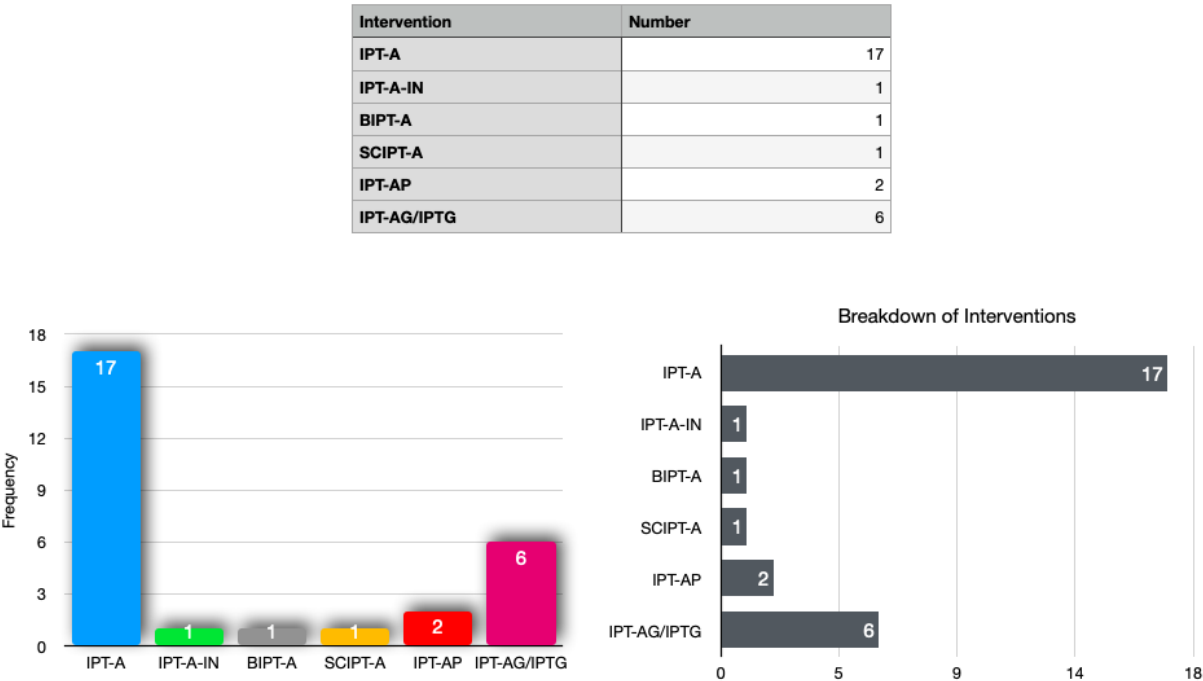


Figure B3

Frequency of Studies by Geography

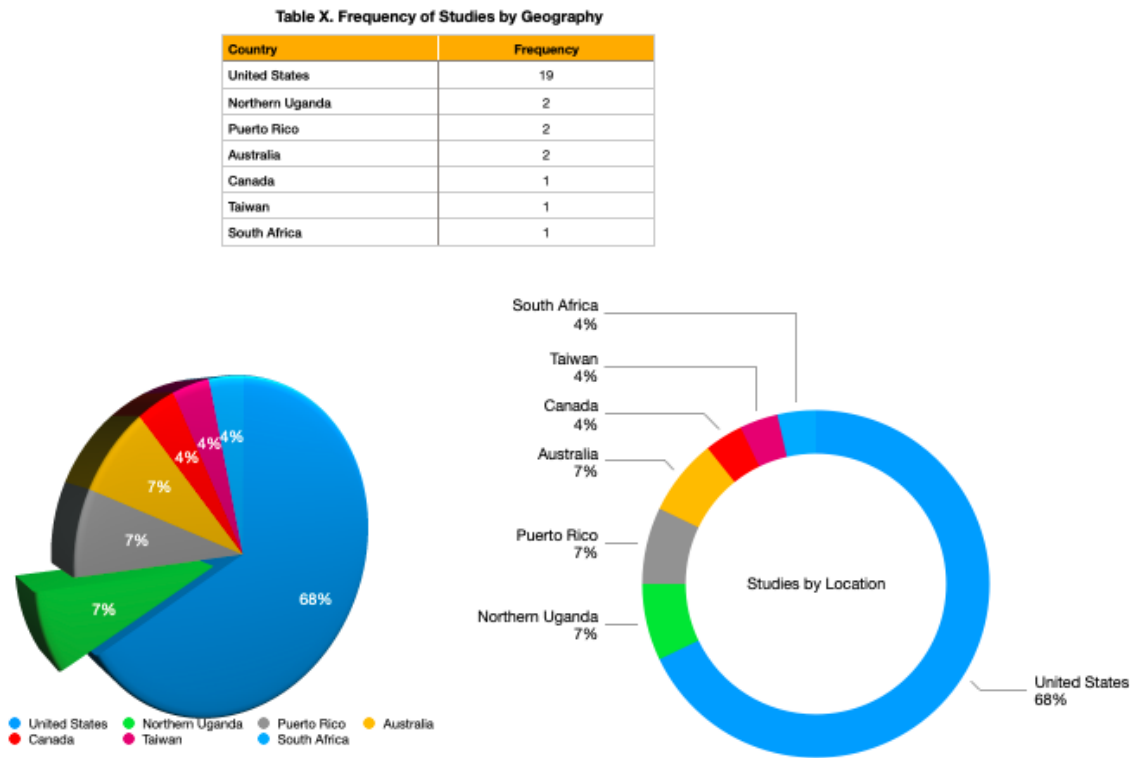
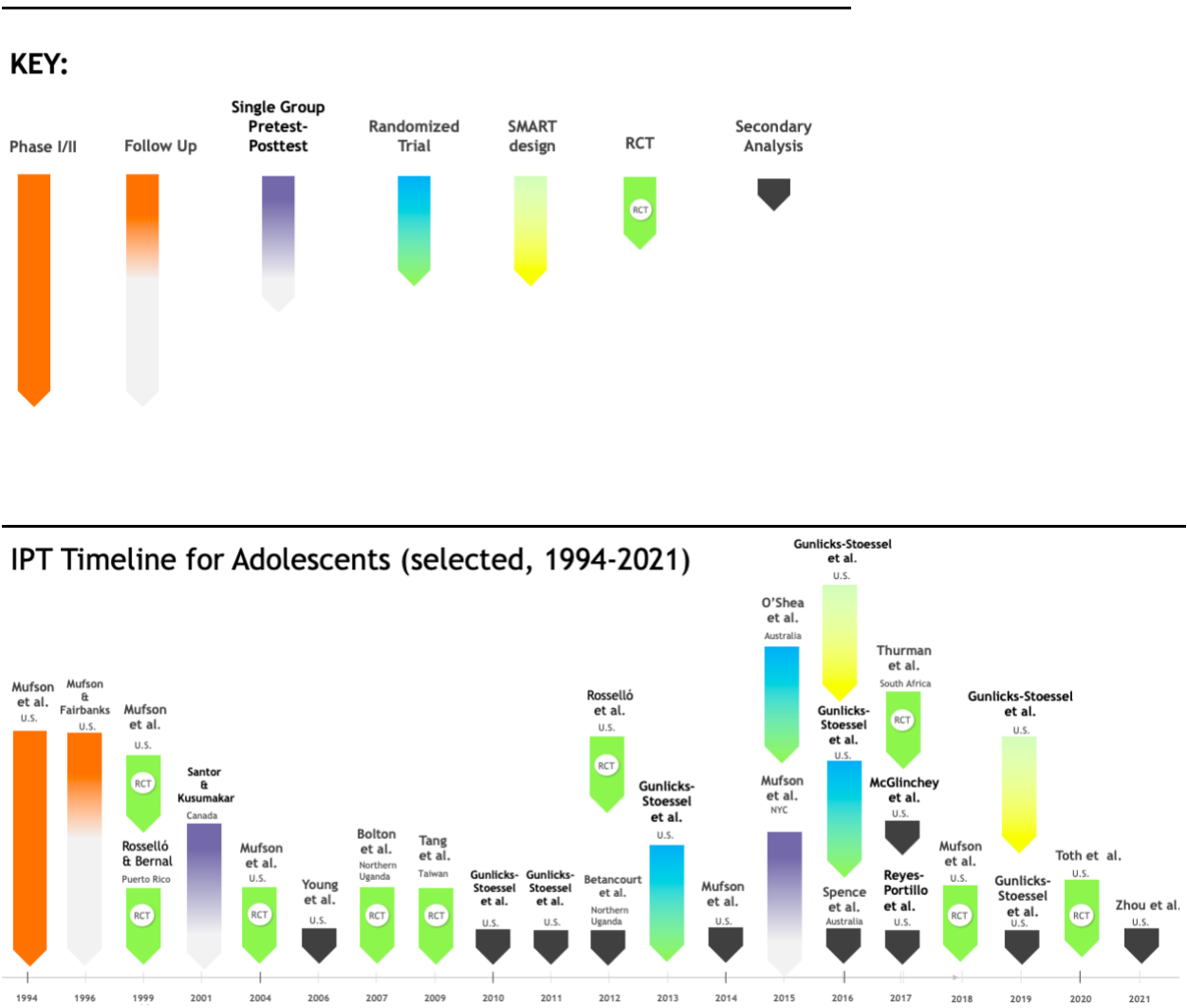


Figure B4

IPT-A Timeline of Studies in Systematic Review



APPENDIX C

Search Documentation and Screening Process

Search Date	FULL SEARCH ID#	TYPE OF SEARCH	DATABASE/SOURCE	SEARCH TERM ID#s
5/17/2021	101	Electronic Database	EBSCO: PsychInfo	01, 02
5/20/2021	101	Electronic Database	EBSCO: PsychInfo/Academic Search Complete	01, 02
5/19/2021	101	Electronic Database	SCOPUS	01,02
5/20/2021	101	Electronic Database	PUBMED	01, 02

SEARCH SYNTAX OR OTHER GUIDELINES FOR THE SEARCH	FIELDS SEARCHED	SEARCH SPECIFIER: Years	SEARCH SPECIFIER: Publication Type/Source Type
("Interpersonal Therapy" OR "IPT" OR "IPT-A" OR "Interpersonal Psychotherapy") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth")	All Fields	1990-2021	Peer-Reviewed Articles only
("Interpersonal Therapy" OR "IPT" OR "IPT-A" OR "Interpersonal Psychotherapy") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth")	All Fields	1990-2021	Peer-Reviewed Articles only
("Interpersonal Therapy" OR "IPT" OR "IPT-A" OR "Interpersonal Psychotherapy") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth")	Title, Keywords, Abstract	1990-2021	Journal, Conference Proceeding, Trade Journal
("Interpersonal Therapy" OR "IPT" OR "IPT-A" OR "Interpersonal Psychotherapy") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth")	All Fields	1990-2021	Peer-Reviewed Articles only

(Columns for Other Specifiers as Needed)	(Columns for Other Specifiers as Needed)	# of Records	Database	NOTES
English only		194	EBSCO	Age ranges include: adolescence (13-17) 143 records; childhood (birth to 12) 66 records; adulthood (18 & older) 58 records; school age (6-12) 41 records; young adulthood (18-29) 32 records; thirties (30-39) 5 records.
English only		342	EBSCO	Age ranges as above; with Academic Search Complete + PsychInfo (duplicates removed)
English only / All Countries & Territories	Limit to Psychology, Neuroscience, Social Sciences, Multidisciplinary, Arts & Humanities, Pharmacology, Toxicology and Pharamceutics, Health Professions, Decision Sciences.	385	SCOPUS	
English only		146	PUBMED	Age ranges: Child (6-12); Adolescent (13-18); & Young Adult (19-24)

APPENDIX D

Screening and Selection Record

PHASE 1: Title/Keywords/Abstract (Screening)				PHASE 2: Full-Text Review (Eligibility)	PHASE 3: Final Decision (Selection)		
Search ID	DATABASES/ SOURCES	YEAR/DATE	AUTHOR/S	TITLE	SUBJECTS/AUTHOR KEYWORDS	ABSTRACT (double click for	TITLE/ABSTRACT DECISION: Y/N/?
101-107	EBSCO	20180501	Mufson, Laura; Rynn, Moira; Yanes-Lukin, Paula; Choo, Tse Hwei; Soren, Karen; Stewart, Eileen; Wall, Melanie	Stepped care interpersonal psychotherapy treatment for depressed adolescents: A pilot study in pediatric clinics.	Adolescent Attitudes; Collaboration; Major Depression; Psychotherapy; Treatment; Adolescence (13-17 yrs); Male; Female	Adolescents with depression are at risk	Y
101-107	EBSCO	May2018	Mufson, Laura; Rynn, Moira; Yanes-Lukin, Paula; Choo, Tse Hwei; Soren, Karen; Stewart, Eileen; Wall, Melanie	Stepped Care Interpersonal Psychotherapy Treatment for Depressed Adolescents: A Pilot Study in Pediatric Clinics.	PSYCHOTHERAPY; DEPRESSION in adolescence; PRIMARY care; ANTIDEPRESSANTS; MENTAL health of youth; Medicinal and Botanical Manufacturing; Pharmaceutical and medicine manufacturing	Adolescents with depression are at risk	N
101-107	EBSCO	Dec2006	Mufson, Laura; Silis, Rebecca	Interpersonal Psychotherapy for depressed adolescents (IPT-A): An overview.	INTERPERSONAL psychotherapy; TEENAGERS; ADOLESCENT psychotherapy; BEHAVIORAL medicine; MEDICAL literature reviews	This paper reviews the main principles	N
101-107	EBSCO	19990601	Mufson, Laura; Weissman, Myrna M.; Moreau, Donna; Garfinkel, Robin	Efficacy of interpersonal psychotherapy for depressed adolescents.	Interpersonal Psychotherapy; Major Depression; Childhood (birth-12 yrs); School Age (6-12 yrs); Adolescence (13-17 yrs); Adulthood (18 yrs & older); Male; Female	Reports the results of a randomized co	Y
101-107	EBSCO	20150901	Mufson, Laura; Yanes-Lukin, Paula; Anderson, Gabrielle	A pilot study of Brief IPT-A delivered in primary care.	Interpersonal Psychotherapy; Major Depression; Primary Health Care; Pediatrics; Childhood (birth-12 yrs); School Age (6-12 yrs); Adolescence (13-17 yrs); Adulthood (18 yrs & older); Young	Objective: The objective was to examin	Y

Change made to Include/Exclude? See also Master Data Extraction	REASON FOR EXCLUSION: DUPLICATE	REASON FOR EXCLUSION: QUALITATIVE	REASON FOR EXCLUSION: BOOK/CONFERENCE	REASON FOR EXCLUSION: NOT IPT-A or variation accepted (OTHER PSYCHOTHERAPY)	REASON FOR EXCLUSION: LIT REVIEW/META/SR /SURVEY	REASON FOR EXCLUSION: NOT RELEVANT	ABSTRACT SCREEN: DECISION - DATE
							06-04-2021
	X						06-04-2021
					X		5/28/21
							5/27/21
							5-27-21

<u>PHASE 2</u>	<u>LINK TO TEXT</u>	<u>DOC TYPE</u>	<u>JOURNAL TITLE</u>	<u>FULL-TEXT SCREEN?</u>
	https://lib.pepperdine.edu	Journal Article	Administration and Policy in Mental Health and Mental Health Services Research	Y
	https://lib.pepperdine.edu	Article	Administration & Policy in Mental Health & Mental Health Services Research	Excluded
	https://lib.pepperdine.edu	Article	Nordic Journal of Psychiatry	Excluded
	https://lib.pepperdine.edu	Journal Article	Archives of General Psychiatry	Y
	https://lib.pepperdine.edu	Journal Article	General Hospital Psychiatry	Y
	https://lib.pepperdine.edu	Article	General Hospital Psychiatry	Excluded

<u>SECONDARY/ CONFIRMATORY DECISION</u>	<u>FINAL DECISION</u>	<u>FINAL DECISION DATE</u>	<u>DECISION NOTES</u>
Y	Include	8-23-21	Stepped-Care version of IPT-A using brief interpersonal psychotherapy
Y	Include	8-25-21	First Randomized control trial by Mufson
Y	Include	8-25-21	Pilot Study of Brief IPT-A

APPENDIX E

Search Syntax

1. ("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A")
AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth")
2. ("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A")
AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("Depressed" OR "Depressive disorder" OR "Depressive Symptoms" OR "Major Depressive Disorder" OR "Major Depression" OR "Dysthymic Disorder" OR "Depression Disorder not otherwise specified")
3. ("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A")
AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("Effectiveness" or "Efficacy" or "Effective" or "Success" or "Outcome")
4. ("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A")
AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("Depressed" OR "Depressive disorder" OR "Depressive Symptoms" OR "Major Depressive Disorder" OR "Major Depression" OR "Dysthymic Disorder" OR "Depression Disorder not otherwise specified") AND "Moderating Factors" OR "Moderators" OR "Moderator")
5. ("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A")
AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("Depressed" OR "Depressive disorder" OR "Depressive Symptoms" OR "Major Depressive Disorder" OR "Major Depression" OR "Dysthymic Disorder" OR

“Depression Disorder not otherwise specified”) AND “Mediating Factors” OR
 “Mediators” OR “Mediator”)

6. (“Interpersonal Therapy” OR “IPT” OR “Interpersonal Psychotherapy” OR “IPT-A”) AND (“Adolescents” OR “Teenagers” OR “Teen” OR “Teens” OR “Young Adults” OR “Youth”) AND (“Depressed” OR “Depressive disorder” OR “Depressive Symptoms” OR “Major Depressive Disorder” OR “Major Depression” OR “Dysthymic Disorder” OR “Depression Disorder not otherwise specified”) AND “Group Therapy” OR “IPT-AG” OR “Group Counseling” OR “Group Intervention”)
7. (“Interpersonal Therapy” OR “IPT” OR “Interpersonal Psychotherapy” OR “IPT-A”) AND (“Adolescents” OR “Teenagers” OR “Teen” OR “Teens” OR “Young Adults” OR “Youth”) AND (“SI” OR “Suicidal Risk” OR “Suicidal Ideation” OR “Suicide Attempt” OR “History of Suicide Attempt”)

APPENDIX F

Comprehensive Search Plan

<u>Search Type</u>	<u>Databases or Sources</u>	<u>Search ID</u>	<u>Search Term ID(s)</u>	<u>Search Syntax or Instructions</u>	<u>Fields to Search</u>	<u>Specifiers</u>	<u>Plan Notes</u>
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	101	01, 02	("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth")	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer-reviewed articles only *English only	SOCPU does not allow for "peer-review" only.
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	102	01, 02, 03	("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("Depressed" OR "Depressive disorder" OR "Depressive Symptoms" OR "Major Depressive Disorder" OR "Major Depression" OR "Dysthymic Disorder" OR "Depression Disorder not otherwise specified")	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer-reviewed articles only *English only	SOCPU does not allow for "peer-review" only.
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	103	01, 02, 04	("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("Effectiveness" or "Efficacy" or "Effective" or "Success" or "Outcome")	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer-reviewed articles only *English only	SOCPU does not allow for "peer-review" only.
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	104	01, 02, 03, 05	("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A") AND ("Adolescents" OR "Teenagers" OR "Teen"	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer-reviewed articles only	SOCPU does not allow for "peer-review" only.

				OR “Teens” OR “Young Adults” OR “Youth”) AND (“Depressed” OR “Depressive disorder” OR “Depressive Symptoms” OR “Major Depressive Disorder” OR “Major Depression” OR “Dysthymic Disorder” OR “Depression Disorder not otherwise specified”) AND “Moderating Factors” OR “Moderators” OR “Moderator”		*English only	
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	105	01, 02, 03, 06	(“Interpersonal Therapy” OR “IPT” OR “Interpersonal Psychotherapy” OR “IPT-A”) AND (“Adolescents” OR “Teenagers” OR “Teen” OR “Teens” OR “Young Adults” OR “Youth”) AND (“Depressed” OR “Depressive disorder” OR “Depressive Symptoms” OR “Major Depressive Disorder” OR “Major Depression” OR “Dysthymic Disorder” OR “Depression Disorder not otherwise specified”) AND “Mediating Factors” OR “Mediators” OR “Mediator”	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer-reviewed articles only *English only	SOCPU does not allow for “peer-review” only.
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	106	01, 02, 03, 10	(“Interpersonal Therapy” OR “IPT” OR “Interpersonal Psychotherapy” OR “IPT-A”) AND (“Adolescents” OR “Teenagers” OR “Teen” OR “Teens” OR “Young Adults” OR “Youth”) AND (“Depressed” OR “Depressive disorder” OR “Depressive Symptoms” OR “Major Depressive Disorder” OR “Major Depression” OR “Dysthymic Disorder” OR “Depression Disorder	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer-reviewed articles only *English only	SOCPU does not allow for “peer-review” only.

				not otherwise specified") AND "Group Therapy" OR "IPT-AG" OR "Group Counseling" OR "Group Intervention"			
Electronic Database	EBSCO: (PsycINFO & Academic Search Complete); SCOPUS; PUBMED	107	01, 02, 07	("Interpersonal Therapy" OR "IPT" OR "Interpersonal Psychotherapy" OR "IPT-A") AND ("Adolescents" OR "Teenagers" OR "Teen" OR "Teens" OR "Young Adults" OR "Youth") AND ("SI" OR "Suicidal Risk" OR "Suicidal Ideation" OR "Suicide Attempt" OR "History of Suicide Attempt"	All Fields (EBSCO) *see master search documentation for other databases	*Years: 1990-2021 *Type: Peer- reviewed articles only *English only	SOCPLUS does not allow for "peer- review" only.

APPENDIX G

Data Extraction Form

Data Extraction Form

Modified from: *Effective Practice and Organisation of Care (EPOC). Data collection form. EPOC Resources for review authors. Oslo: Norwegian Knowledge Centre for the Health Services; 2013. Available at: <http://epoc.cochrane.org/epoc-specific-resources-review-authors>*

Document ID#

Authors and Year (<i>last names of authors and year of publication, e.g., Johnson, Jones, and Jackson 2011</i>)

Full Document Title

Research Variables
Efficacy

Notes: Efficacy can be defined as the performance of an intervention under ideal and controlled circumstances, whereas effectiveness refers to its performance under ‘real-world’ conditions

General Information

Date form completed (<i>dd/mm/yyyy</i>)	
Initials/ID of person extracting data	
Source/Publication Type (<i>journal, book, conference, report, dissertation, abstract, etc.</i>)	
Source Name (<i>Title of Journal, Book, Organization, etc.</i>)	
Publication Status (<i>Published, Unpublished</i>)	

Document Language	English
OTHER:	
Notes:	

Design Characteristics and Methodological Features

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Aim of study		
General Method (Quant, Qual, Mixed)		
Design or Specific Research Approach		
Other		
Other		
Other		
Other		
Notes:		

Assessment of Research Variables

RESEARCH VARIABLES	How Assessed (<i>Measure, Observation, Interview Question, Archival, etc.</i>)	Reliability/Validity/Utility	Location in text (<i>pg & ¶/fig/table</i>)
Variable 1			
Variable 2			
Variable 3			
Variable 4			
Variable 5			
When were measures conducted? Pre and/or post.			
Notes:			

Study Participant Characteristics and Recruitment

	Description as stated in report/paper	Location in text (<i>pg & ¶/fig/table</i>)
Population of Interest		
Recruitment Methods		
Sample Size		
Age		
Gender		
Race/Ethnicity		
SES		

Diagnosis (e.g., MDD, PDD)		
Other		
Notes:		

Setting Characteristics

	Descriptions as stated in report/paper	Location in text (pg & ¶/fig/table)
Study Location		
Data Collection Setting(s)		
Other		
Other		
Notes:		

Analyses Conducted

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
Descriptive Statistics used		
Inferential Statistics used		
Moderators (P-values?)		
Qualitative Analyses conducted		
Notes:		

Results

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
Key Result #1		
Key Result #2		
Key Result #3		
Key Result #4		
Key Result #5		
Key Result #6		
Key Result #7		
Key Result #8		
Notes:		

Conclusions and Follow-up

	Description as stated in report/paper	Location in text (pg & ¶/fig/table)
Key conclusions of study authors		
Study Author's Recommendations for Future Research		
Does the study directly address your review question? <i>(any issues of partial or indirect applicability)</i>		
Your Take-Aways: General		

Your Take-Aways: Implications for Practice		
Salient Study Limitations (to inform Quality Appraisal)		
References to other relevant studies		
Other publications from this dataset		
Further study information needed? <i>(from whom, what and when, contact info)</i>		
Correspondence received <i>(from whom, what and when)</i>		
Notes:		

APPENDIX H

Quality Appraisal Form

Individual Quality Appraisal for Systematic Reviews (Harrell, 2021)

INDIVIDUAL STUDY QUALITY APPRAISAL FORM FOR SYSTEMATIC REVIEWS

Developed by Shelly P. Harrell, Ph.D., Pepperdine University

Author(s) and Year:

Title:

Methodology: Quantitative Qualitative Mixed Methods

- 1. Specific Design/Inquiry Approach:** Pilot Study: Participants received 6 weekly sessions of BIPT-A. Acceptability and feasibility were measured by examining session attendance, treatment completion and treatment satisfaction. Paired-samples t tests were used to preliminarily examine treatment outcome as measured by both self-report and clinician-administered assessments of depression, social functioning and global impairment.

RATING SCALE: Strong=3 Good/Adequate=2 Weak=1 Missing=0 N/A

Please rate each section below (1-9) with a number from above (3, 2, 1, 0, or N/A) based on the key.
See section 10. for “Overall Rating” scoring instructions.



- 2. Strength of Literature Foundation and Rationale for Study:**
(POSSIBLE CONSIDERATIONS: current and relevant references, background literature sufficiently comprehensive, Need/Rationale for study clearly stated, etc.)
- 3. Clarity and specificity of Research Aims/Objectives/Questions/Hypotheses:**
- 4. Quality of research design or methodological approach:**
GENERAL CONSIDERATIONS: provides rationale for design chosen, appropriateness for research questions, clear description of design and methodological approach, strength of design characteristics utilized
QUANTITATIVE CONSIDERATIONS: internal and external validity considered in design; potential confounds identified and addressed in some way, specific design-based “risk of bias” criteria considered such as randomization, blinding
QUALITATIVE CONSIDERATIONS: consistent with specific practices relevant to the inquiry strategy (e.g., phenomenological study, case study, grounded theory, etc.), triangulation, audit trail
- 5. Sample Selection and Characteristics:**
GENERAL CONSIDERATIONS: detailed description of sample characteristics, adequacy of sample characteristics in the context of research aims, detailed description of recruitment and selection of participants; rationale provided for sample size; inclusion and exclusion criteria indicated as relevant
QUANTITATIVE CONSIDERATIONS: representativeness of sample, adequacy of sample size in context of design, extent of selection or sample bias
QUALITATIVE CONSIDERATIONS: sample size appropriate for inquiry strategy; rationale for purposeful sample characteristics
- 6. Data Collection Tools (Scales, Observation, Interviews, etc.):**
GENERAL CONSIDERATIONS: rationale for selection, appropriateness for assessing variables, development of study-specific tool or process clearly described, piloting, pretesting;
QUANTITATIVE CONSIDERATIONS: psychometric properties (reliability, validity, utility) reported, adequacy of psychometric properties, normative or standardization data described

QUALITATIVE CONSIDERATIONS: appropriateness for inquiry strategy and purpose; interview or other data collection process described clearly and comprehensively

7. Data Collection Processes:

(*POSSIBLE CONSIDERATIONS*: data collection procedures clearly described in sufficient detail, intervention strategies and implementation described in detail, quality of data collected, design-specific considerations such as attrition in RCTs, saturation in grounded theory, etc.)

8. Analysis and Presentation of Data:

GENERAL CONSIDERATIONS: appropriateness of analysis for research questions and type of data; results presented clearly and comprehensively; usefulness and clarity of any tables, graphs, and charts

QUANTITATIVE CONSIDERATIONS: power and effect size reported; relevant statistics reported clearly; effective use of tables

QUALITATIVE CONSIDERATIONS: textual data and/or direct quotes reported and used effectively; transparent description of the development of themes from raw data

9. Discussion of Study Limitations:

GENERAL CONSIDERATIONS: identifies and discusses limitations in the context of design/strategy utilized

QUANTITATIVE CONSIDERATIONS: addresses various forms of bias, internal validity, external validity (generalizability), ecological validity

QUALITATIVE CONSIDERATIONS: transferability, credibility, transparency,

10. Consideration of culture and diversity:

(*POSSIBLE CONSIDERATIONS*: attention to diversity within sample, includes culturally appropriate methods

and tools, avoids biased language, uses appropriate terminology, etc.)

	10	9	8	7	6	5 or below
OVERALL RATING:	EXEMPLARY	EXCELLENT	STRONG	GOOD.	ADEQUATE	WEAK
	(e.g., all "3"s)	(e.g. mainly "3"s)	(e.g. some 2's).	(e.g., mostly "2"s).	(2s and 1s)	(e.g., mostly "1"s)

Overall Rating Scoring instructions:

1. Please highlight one of the "Overall Rating" Categories above.

1. Select a score out of 10.

APPENDIX I

Depression Measures Within RCTs

Acholi Psychosocial Assessment Instrument (APAI)

This measure was created by the research team to address symptoms of depression within this cultural context (*two tam*, *kumu*, and *par*—are local depression-like syndromes). Of the five psychosocial and mental health problems identified, three of these were related to depression. When combined they offered varying but incomplete combinations of *DSM-IV* related depression symptoms. Test–retest reliability for the depression symptom scale was 0.84.

Beck Depression Inventory (BDI; BDI-II; BDI-Y)

The Beck Depression Inventory has gone through an array of versions. The BDI is a self-report questionnaire invented by American psychiatrist Aaron T. Beck and colleagues in 1961 with subsequent revisions beginning in 1971. Beck also pioneered CBT as a novel psychotherapeutic approach in aiding clients through the examination and investigation of the relationship between one’s thoughts (cognitions) feelings and subsequent behaviors. The BDI was originally conceived through clinical observations made “about the attitudes and symptoms displayed frequently by depressed psychiatric patients and infrequently by nondepressed psychiatric patients” (Beck et al., 1988, p. 79). Since 1961, the Beck Depression Inventory has been used as a psychometric tool to measure the severity and intensity of the cognitive and affective factors of depression in psychiatric patients, individuals diagnosed with clinical depression, as well as normal populations. Initially, the test was designed to be administered by trained interviewers; however, it is more often than not self-administered. The BDI-II was created to improve content validity corresponding to *DSM-IV* depression and includes items measuring affective, cognitive, somatic, and vegetative symptoms of depression. Finally, the BDI-II has been found to be sensitive to change in depression cross culturally (Smarr & Keefer,

2011). A difference in 5 points corresponds to minimal important clinical difference, 10–19 points to a moderate difference, and ≥ 20 points to a large difference (Viljoen et al., 2003).

The BDI-II The Beck Depression Inventory (BDI-II) is a self-report, 21-item questionnaire that covers a range of symptoms and attitudes of depression. The questionnaire highlights that there are 21 groups of statements, each with four potential answers numbered 0 to 3 in terms of intensity. The specific topics covered by the administrative questionnaire are listed below and numbered according to their presentation on the measure: (1) mood/sadness, (2) pessimism, (3) sense of failure/past failure, (4) loss of pleasure/lack of satisfaction, (5) guilty feelings, (6) punishment feelings, (7) self-dislike, (8) self-criticalness/self-accusation, (9) suicidal thoughts or wishes, (10) crying, (11) agitation, (12) loss of interest/social withdrawal, (13) indecisiveness, (14) worthlessness, (15) loss of energy/work inhibition, (16) changes in sleeping pattern/sleep disturbance, (17) irritability, (18) changes in appetite, (19) concentration difficulty, (20) tiredness or fatigue, and (21) loss of interest in libido/sex. The BDI-II has demonstrated good test-retest reliability, internal consistency and concurrent validity (Beck et al., 1996). The BDI-Y is a 20-item self-report instrument measuring severity of depressive symptoms over the past 2 weeks. Adolescents rated their responses on a 0–3 scale (0 = *Never*, 3 = *Always*). Higher scores indicate greater depressive severity. Psychometric properties of the BDI-Y have been reported by Stapleton et al. (2007).

Children's Depression Inventory (CDI)

The CDI (Kovacs, 1985) is a 27-item self-rated symptom-oriented scale suitable for school-age children and adolescents. It was developed using the BDI for adults as a model. The two RCTs in this SR that use the CDI are from Puerto Rico. Authors expressed that, “data with

the CDI with different Puerto Rican samples suggest that it is valid (Bernal, Rosselló, & Martinez, 1997) and internally consistent (Rosselló, Guisasola, Ralat, Martinez, & Nieves, 1992), with alphas above .83” (Rosselló et al., 2012, p. 40).

Children Depression Rating Scale – Revised (CDRS-R)

The CDRS-R was based on the Hamilton Rating Scale for Depression (HRSD) and has become the most widely used rating scale to assess for severity of depression and change in depressive symptoms in children and adolescents (Mayes et al., 2010). Although originally created for children aged 6–12, studies have shown psychometric properties of for the CDRS-R in adolescents are comparable to those previously reported for the child age group (Mayes et al., 2010; Poznanski & Mokros, 1996). The measure is a 17-item scale, with items ranging from 1 to 5 or 1 to 7 (possible total score from 17 to 113).

Center for Epidemiologic Studies Depression Scale for Children (CES-DC)

The CES-DC has been widely used and validated in diverse populations, including adolescents, is widely studied in the literature, and is considered an acceptable measure of depression (Smarr & Keefer, 2011). Questions on this measure assess the frequency of specific wellness or problem symptoms in the prior week including feelings of happiness, appetite, self-esteem, energy levels, and difficulty sleeping (Thurman et al., 2017). The CES-DC (Weissman et al., 1980) is a 20-item self-report scale that measures the severity of depression symptoms over the past week with scores ranging from 0–60. All items inquire about the frequency of symptoms, which are rated on a 4-point Likert scale. A cut-off score of 15 points is suggestive of significant depressive symptomatology in children and adolescents. Research supports the

reliability and validity of the CES-DC as a measure of depressive symptomatology in children, adolescents, and young adults (Fendrich et al., 1990). As reported by Thurman et al. (2017), “The CES-DC has been validated among youth in Rwanda and previously applied in South Africa” (p. 226).

Hamilton Rating Scale for Depression (HRSD)

This scale, also referred to as the HAMD, is a widely used clinician rated measure of depression. Higher scores correlate with greater depression symptomatology, with scores ranging from 0–74. Results from a meta-analysis examining a 49-year period suggests the HAMD to provide a reliable assessment of depression, good levels of internal consistency, and interrater and test-retest reliability (Trajković et al., 2011).

Patient Health Questionnaire (PHQ-9)

The nine items on the PHQ correspond to the nine criteria for depression according to the *Diagnostic and Statistical Manual of Mental Health Disorders (DSM-IV and DSM-5)*. This is a widely used measure and studies have been conducted in a variety of settings. Along with the BDI-II, the PHQ-9 has also been endorsed by the National Institute for Health and Clinical Excellence for use in primary care in measuring baseline level of depression and response to treatment (Smarr & Keefer, 2011). Severity of scores on depression on the PHQ-9 highly correlate with scores on the BDI ($r = 0.73$; Martin et al., 2006).

APPENDIX J

IRB Non-Human Subjects Notification Form

**PEPPERDINE UNIVERSITY IRB NON-HUMAN SUBJECTS NOTIFICATION FORM
FOR RESEARCH THAT DOES NOT INVOLVE HUMAN SUBJECTS**

Investigator Name: Luke Rex M.A.
 Status: Faculty: Francesca Parker, Psy.D. Student: _____
 Faculty Chair (if applicable): Natasha Thapar-Olmos, Ph.D.
 Proposal Research Title: EFFECT, MEDIATING AND MODERATING VARIABLES OF
INTERPERSONAL PSYCHOTHERAPY FOR DEPRESSED ADOLESCENTS

Per Pepperdine University Institutional Review Board (IRB) guidelines all proposed research that does not involve direct contact with human subjects requires a notification form be submitted for review.



Research that requires IRB review must meet the definition of human subject's research. The code of federal regulations provides the following definitions:

- For the purposes of the IRB, research is defined as a systematic investigation designed to develop or contribute to generalizable knowledge.
- Human subject means a living individual about whom an investigator (whether professional or student) conducting research obtains
 - (1) Data through intervention or interaction with the individual, or
 - (2) Identifiable private information.

If your research does *not* involve the participation of human subjects **and** you are *not* using/collecting any data that has identifiable private information, your research is not subject to IRB review and approval but *does* require the submission and filing of a non-human subjects notification form to the IRB office.

When submitting this notification form please include the following as separate documents:

- Signatures by ALL Principal Investigator(s) (student and/or faculty) and Faculty Chair (if applicable).
- Abstract (no more than 1-page) outlining the study's research design and methodology.

I verify that this proposed research does not involve the use of human subjects, either directly or indirectly.	
 _____ Principal Investigator(s)/Student Signature	<u>December 6th 2020</u> _____ Date
<u>Luke Rex</u> _____ Print Name (s)	
 _____ Faculty Chairperson Signature (if applicable)	<u>December 6th 2020</u> _____ Date
<u>Natasha Thapar-Olmos, Ph.D.</u> _____ Print Name	