

ABSTRACT

Title of Dissertation: CLINICAL FEASIBILITY OF THE UNFAMILIAR PEER PARADIGM IN CLINICAL PRACTICE SETTINGS: CLINICAL INSIGHT INTO POSSIBLE IMPLEMENTATION AND EFFECTIVENESS IN CLINICAL PRACTICE

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Exposure-based treatment for social anxiety disorder (SAD) is an extensively supported evidence-based treatment. However, there are multiple barriers to implementation in routine practice. Furthermore, exposure-based treatments must accurately reflect clients' social environments for optimal effect. Emulating an adolescent client's social environment can be particularly challenging, as this often involves interactions with same-age, unfamiliar peers. To this end, the current study explored whether a lab-based model for eliciting social anxiety (i.e., Unfamiliar Peer Paradigm [UPP]) can be modified to leverage task-sharing principles, namely use of *lay individuals*, to more accurately simulate the social contexts that typify adolescent clients' symptoms and impairments during in-session exposures. For this dissertation, I reviewed lab-based applications of the UPP and proposed ways to tailor the UPP for therapeutic exposures with adolescent clients. To further expand this proposed model, I sought clinical insight from experts

in the field: practicing clinical psychologists. I surveyed clinicians on their current clinical practices of utilizing exposure-based treatment for social anxiety disorders and conducted qualitative interviews to gather feedback on their perceived feasibility and the clinical utility of implementing the UPP in therapeutic settings. Ten practicing psychologists were interviewed. Major themes identified across interviews included generally positive impressions of exposure-based treatments and multiple barriers to implementation. With regards to the UPP, major themes included discussions of feasibility and practicality of implementation, with a generally positive impression of the UPP as a clinically useful approach. With insight from clinical experts, the current study can further the work on utilizing the UPP using lay individuals through task-sharing principles to further enhance the effectiveness of in-person social anxiety-based exposures for adolescents.

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Dissertation to be submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
2025

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Dedication

I could not have made it this far without the help and support of so many people. Thank you to my parents, Peter and Teresa Keeley, for allowing me to always go after my goals and cheering me on along the way. To my husband-to-be Jeremy, you have been by my side throughout this journey, thank you for your unwavering faith in me. To Christina Savage, this truly would not be possible without you, I am eternally grateful. To my lab sisters, Noor Qasmieh and Bridget Makol, thank you for all the wonderful memories both in and out of school and being there for me throughout this journey. Love you all always.

Acknowledgements

I would like to express my gratitude to my advisor, Dr. Andres De Los Reyes, for his support throughout my whole graduate school journey. I would also like to thank the members of my Doctoral Dissertation Committee: Drs. Ethan Mereish, Elizabeth Talbott, Hedwig Teglassi, and Fanita Tyrell. Your clinical insight and feedback were sincerely appreciated. Lastly, I would like to thank the psychologists whom I interviewed, for making this research possible.

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Chapter 1: Introduction

Social Anxiety Disorder: Etiology, Characteristics, Development, and Maintenance

Social Anxiety Disorder (SAD) is the persistent and impairing fear of social situations where one can be negatively evaluated by others (American Psychiatric Association [APA], 2013). Some situations include social interactions (e.g., speaking with unfamiliar peers, going to parties) and performance-based evaluations (e.g., public speaking, sports and art performances), as well as everyday situations in which one's behavior might be observed by other people (e.g., writing, eating, drinking; APA, 2013; Ruscio et al., 2008). In the United States, social anxiety is one of the most common mental health concerns, affecting nearly 7-to-15% of the population, and has a typical age of onset ranging from 14 to 17 years (APA, 2013; Kessler et al., 2012). This suggests that aspects of the adolescent developmental phase contribute to social vulnerabilities and therefore warrant exploration.

Among the anxiety disorders, SAD stands out as a condition characterized by symptoms and impairments linked to even benign social interactions, particularly with unfamiliar people. Within this condition there is notable variation in how symptoms may present; this notion is especially relevant when examining the experience of SAD during adolescence. For example, relative to adolescents without SAD, some adolescents with SAD display higher levels of distress during informal speaking and social interactions (e.g., parties, social events), particularly with unfamiliar, same-age peers (Cannon et al., 2020; Glenn et al., 2019; Hofmann et al., 1999). In contrast, other adolescents may report relatively higher distress during performance-based situations (e.g., Aune et al., 2023; Fuentes-Rodriguez et al., 2018). In either case, adolescents who experience SAD often engage in avoidance strategies to cope with this distress, including overt avoidance of social situations, as well as more subtle avoidance (e.g., averting eye contact)

when it is not possible to avoid the situation (e.g., class projects, social engagements that require attendance; Okuno et al., 2022; Rezeppa et al., 2021).

The maladaptive use of avoidance strategies is considered a key component of contemporary conceptual models of the development and maintenance of SAD symptoms (e.g., Clark & Wells, 1995; Rapee & Heimberg, 1997). Specifically, these avoidance strategies are embedded within a cascade of somatic and cognitive experiences that reinforce fears about social situations and thus trigger avoidance behaviors linked to these situations (Morrison & Heimberg, 2013). Within conceptual models of SAD, confronting an anxiety provoking social situation (e.g., class presentation), triggers both *somatic* symptoms (e.g., racing heart, flushed face, increased perspiration; Ginsburg et al., 2006) and *cognitive* symptoms (e.g., increased attention towards the self, catastrophic predictions, perception of social inadequacy; Clark & Wells, 1995). To cope with these aversive experiences, socially anxious individuals are compelled to engage in *behavioral* strategies, ranging from subtle avoidance tactics (i.e., safety behaviors such as limiting eye contact) to more overt avoidance of social situations entirely (Clark & Wells, 1995; Hofmann, 2007; Rapee & Heimberg, 1997; Spence & Rapee, 2016).

Although avoiding social situations relieves symptoms in the short term, reliance on avoidance prevents disconfirmation of expectancies (Craske & Barlow, 2006). That is, reliance on avoidance-based strategies does not allow the individual to appreciate that feared outcomes might not occur. Thus, in the long term, avoidance produces impaired functioning, including reduced positive contact with peers, limited opportunities to make friends, and difficulty developing adaptive coping skills (Clark & Wells, 1995; Hofmann, 2007; Stein & Kean, 2000).

Targeting Avoidance Behaviors: Exposure Therapies

Given the prominence of avoidance in SAD, one of the most well-studied and established psychosocial treatments for the condition is exposure-based treatments (Kaczurkin & Foa, 2015; for a review, see Craske et al., 2008, 2014). The foundations for these treatments extend from conceptual models of SAD. Specifically, emotional processing theory states that there exists an underlying structure of fear and anxiety within individuals (Foa & Kozak, 1986). This fear and anxiety structure includes the spectrum of reactions to anxiety provoking stimuli, including persistent avoidance of feared stimuli (e.g., Kaczurkin & Foa, 2015). Persistent avoidance hinders experiences that lead to learning, particularly that feared stimuli might not produce feared outcomes. In this respect, historical Pavlovian models of fear conditioning indicate that maladaptive fear and avoidance strategies can be “unlearned” via exposure to “mismatches” between an expected adverse outcome (e.g., “No one is going to talk to me”) and the actual outcome (e.g., “I had someone come up and talk to me,” Rescorla & Wagner, 1972). In fact, current models of *inhibitory learning* hinge on building new associations and changing reactions to feared stimuli, and in a way that extinguishes or leads to the extinction of previous, maladaptive associations (e.g., avoidance of feared stimuli; Sewart & Craske, 2020).

The conceptual foundations of exposure-based treatments inform techniques used with clients, namely *therapeutic exposures*. Exposures consist of preplanned “practices”—simulations of the social experiences that account for the client’s symptoms and impairments (e.g., having to talk on the phone, public speaking in front of others). These exposures allow clients to confront feared stimuli, and as such exposures are seen as an “active ingredient” in treatment that drives changes in client outcomes (Hofmann & Hay, 2018; Peris et al., 2015, 2020). Yet, not all therapeutic exposures are created equal (see Sewart & Craske, 2020). To optimize outcomes,

exposures must be tailored or adapted for each client and in the case of SAD clients, to the unique social environments that account for symptoms and impairments. Thus, scholars have developed multiple methods to tailor exposures for SAD (see Kaczurkin & Foa, 2015). These tailoring methods include: (a) *in vivo exposure* (i.e., exposures where clients directly interact with the feared stimuli, often in a gradual manner); (b) *imaginal exposure* (i.e., mentalizing social interactions with feared stimuli and associated feelings of anxiety); (c) *virtual reality exposure* (i.e., exposures simulated via technology, typically implemented when *in vivo* exposures cannot be feasibly constructed); (d) *graded exposure* (i.e., exposures are placed on a fear hierarchy where various interactions with the feared stimuli are ranked according to the level of fear they typically provoke); (e) *flooding* (i.e., facing the most difficult exposures with the feared stimuli first for an extended period); and (f) *systematic desensitization* (i.e., incorporating various relaxation techniques and coping strategies alongside the exposures to help manage the associated distress and help pair feelings of relaxation with the feared stimuli). In this respect, therapists collaborate with clients to determine the kinds of therapeutic exposures that best address their needs (i.e., *shared decision-making*; see Langer & Jensen-Doss, 2018).

In-session Exposure Treatment with Adolescents

Among adolescent clients, prior research and theory indicate that tailoring exposures must also address “real-world” social experiences. Adolescence is a developmental period marked by increased social independence with reduced support from caregivers (see Smetana, 2008). As adolescents begin to separate from their caregivers, they are at higher risk for experiencing a range of aversive social encounters, namely with same-age peers (e.g., bullying, social isolation; Prinstein et al., 2018). Separation from caregivers also exposes adolescents to a wider variety of *social contexts* than they experienced earlier in development, including social

encounters in the home, at school, with peers, and for some youth, in the workplace (e.g., De Los Reyes et al., 2023). Across these contexts, peer relationships are particularly central to social development. As such, the avoidance strategies that typify SAD translate to interference with adolescents' developmental competencies (e.g., making and maintaining friendships, social problem solving; Caouette & Guyer, 2014; Vasey & Daleiden, 1996).

Given the unique developmental considerations involved with implementing exposure-based treatments with adolescent clients, a relatively understudied implementation issue stems from key characteristics of *in vivo* exposures, namely those with whom clients interact. Among adolescent clients, SAD symptoms and impairments often revolve around interactions with same-age unfamiliar peers (Glenn et al., 2019; Hofmann et al., 1999). Yet, the typical *in vivo* exposures delivered in service settings involve clients interacting with clinic personnel, such as the treating clinician or clinic staff (see Raggi et al., 2018). For many adolescents, it would be safe to assume that clinic personnel are unlikely to serve as accurate simulations of the same-age peers that typify adolescents' social environments. Equally important is the failure to simulate the unfamiliarity of the encounter. Granted, near the beginning of treatment, social interactions with clinicians or staff may accurately simulate the unfamiliarity that typifies anxiety-provoking social interactions. Yet, as the course of treatment develops, these interaction partners become progressively more familiar, thus diluting the potency of exposures over time, and during arguably critical moments in care (e.g., exposures conducted as homework in between sessions, treatment termination). Taken together, typical *in vivo* exposures are insufficiently tailored to accurately simulate adolescent clients' social environments, thus raising the risk that clients' gains in therapy will fail to stand the test of time (Sewart & Craske, 2020).

The need to consider additional methods for tailoring *in vivo* exposures for adolescent clients reflects the broader state of the literature. Specifically, many clients who receive a course of exposure-based treatment remain symptomatic following services (e.g., Aune et al., 2021; Taylor et al., 2012). Further, the vast majority of providers who treat child and adolescent clients rarely, if at all, use exposure-based treatments (e.g., Becker-Haimes et al., 2017a; Whiteside et al., 2016). Prior work also indicates that many clinicians lack training and understanding of how to execute exposures (Becker-Haimes et al., 2020; Reid et al., 2017a). They also lack exposure-supporting stimuli, such that therapists are less likely to implement exposures without having access to materials relevant to their client's needs, including social partners or necessary props (Sars & van Minnen, 2015). In fact, clinicians report difficulty in identifying people who are readily available to participate in exposures (Becker-Haimes et al., 2020). Perhaps for these reasons, clinicians who use exposure-based treatments prefer instructing child and adolescent clients to complete exposures outside of sessions (i.e., *client-directed exposures*; Whiteside et al., 2016). This is of particular concern for two reasons. First, by construction, exposures outside of session cannot be calibrated by clinicians or tailored in a graded fashion, as is typical of *in vivo* exposures. Second, prior work indicates that client-directed exposures alone do not explain all treatment gains (Franklin et al., 2011). Clearly, we require additional methods to appropriately tailor *in vivo* exposures for adolescent clients.

Addressing the Gaps

These concerns with implementing exposure-based treatment in practice reflect the larger problem of the *research-to-practice gap*. This gap reflects the notion that the effects of exposure-based treatments as estimated within randomized controlled trials fail to generalize when the treatments are delivered in clinical practice, and highlights the existence of barriers that

otherwise impede the implementation of these treatments in practice (Becker-Haimes et al., 2020; 2023; De Los Reyes et al., 2022). Furthermore, practicing clinicians often rely on their own clinical experiences to determine what treatments they provide as well as what evidence-based treatments they reject (Stewart & Chambless, 2007). These issues stem from a variety of factors, including the therapist's own reluctance in using the treatment and perceptions of the treatment itself (e.g., unintentional harm to patient, own distress with exposure-based treatments; Becker-Haimes et al., 2017b). Another issue is the reluctance from practicing clinicians to implement exposure-based treatments in their practice (Thomassin et al., 2019). This is due to a multitude of factors, including negative perceptions of exposure treatments, lack of clinician training and understanding on effective clinical implementation, and both clinician and client distress related to undergoing exposures in session (Becker-Haimes et al., 2020). Broadly, there is also significant difficulty with effectively implementing exposures on an organizational level (e.g., length of sessions, lack of readily available personnel; Becker-Haimes et al., 2020). Thus, in recent years there has been an effort to provide training and resources to improve therapist perception and practice of assessment, classification, and treatment planning for socially anxious adolescents that are sensitive to key aspects of the social contexts in which interactions manifest (Glenn et al., 2019).

Efforts to bridge the research-to-practice gap should continue to include the voices of key stakeholders in the delivery of exposure-based treatments. That is, seeking feedback from service providers regarding their impressions of exposure-based treatments (i.e., perceptions of efficacy and barriers) is key in the development of intervention. Turning towards lab-based techniques for eliciting social anxiety may also provide inspiration regarding novel approaches that may meet both client and clinician needs for intervention. Modifying lab-based techniques in collaboration

with service providers may facilitate striking a balance between evidence-based procedures and the flexibility needed to tailor exposures in service delivery. In recent years, emerging evidence supports consideration of one laboratory-based tool, namely the Unfamiliar Peer Paradigm.

The Unfamiliar Peer Paradigm (UPP): Research Application

Initially conceived as a laboratory assessment tool, the UPP consists of a series of three counterbalanced social interaction tasks, originally adapted from work with adult clients diagnosed with SAD (see Beidel et al., 2010). These tasks were designed to simulate interactions with same-age, unfamiliar peers, with a structure akin to traditional *in vivo* exposures. Briefly, the Simulated Social Interaction Test (SSIT; Beidel et al. 2000; Curran, 1982) is a structured role-play task where the adolescent and an unfamiliar interaction partner interact in six different social situations (e.g., offering and accepting help). The Unstructured Conversation Task (UCT; Beidel et al. 2010), is an unstructured role-play where the adolescent and an unfamiliar interaction partner speak with one another for 3 minutes following the prompt of the adolescent being new to school and not knowing anyone. The Impromptu Speech Task (IST; Beidel et al., 2010) is a standardized task where the adolescent speaks in front of an audience of three research personnel about three predetermined topics (e.g., political, public health, and legal topics). Developmentally appropriate versions of these tasks have been used to estimate the outcomes of exposure-based therapies delivered to adult and youth clients (Beidel et al., 2000, 2010, 2014). Complete descriptions of these tasks appear elsewhere (Cannon et al., 2020; Glenn et al., 2019).

The recruitment and training procedures for the UPP address challenges noted previously regarding tools and support for effective delivery of *in vivo* exposures (Becker-Haimes et al., 2023; Sars & van Minnen, 2015). A key feature of the UPP is the interaction partner embedded in the interaction tasks. Adolescents interact with research volunteers who receive minimal

training to “stand in” or act as *unfamiliar peer confederates*. These research volunteers consist of youthful-looking undergraduate and post-baccalaureate research assistants who receive training to act as same-age adolescents (see Cannon et al., 2020). With roughly 15 hours of training spread out over approximately three weeks, unfamiliar peer confederates receive training on how to deliver the exposure-based tasks described previously. For the majority of the unfamiliar peer confederates who were involved at the site in which the UPP was developed and assessed, their role in these studies represented their first research experience. The lack of training needed to prepare unfamiliar peer confederates, along with their lack of experience generally, provides “proof of concept” support for the ability of relatively untrained individuals to participate in the delivery of *in vivo* exposures.

The UPP has undergone extensive evaluation and demonstrates an ability to yield data to characterize the mental health status of adolescents who were administered the paradigm. The data yielded from the UPP traverses a host of modalities, including: (a) surveys taken from various informants (e.g., parent, adolescent; Karp et al., 2018; Qasmieh et al., 2018); (b) behavior ratings from trained independent observers (TIOs) (Botkin et al., 2021; Follett et al., 2023; Glenn et al., 2019; Greenberg & De Los Reyes, 2022; Makol et al., 2020); and (c) self-reports about changes in arousal within the UPP (Cannon et al., 2020; Rausch et al., 2017; Szollos et al., 2019). Importantly, the aforementioned studies about the UPP have included survey data provided by parents and adolescents, who completed their reports before administration of the UPP. One particularly noteworthy finding indicates that unfamiliar peer confederate reports of adolescent social anxiety symptoms as observed during the social interactions significantly correlated to adolescent self-report of their arousal within these same interactions (Deros et al., 2018). This finding highlights the potential value of soliciting the

feedback of unfamiliar peer confederates when understanding how adolescent clients perform within *in vivo* exposures.

Additionally, TIOs have been utilized to assess adolescents' social skills and social anxiety within the UPP (see Botkin et al., 2021; Cannon et al., 2020; Follett et al., 2023; Glenn et al., 2019; Greenberg & De Los Reyes, 2022; extensive information on coder training and characteristics has been listed in online supplementary material for the aforementioned articles). The TIOs consisted of undergraduate and postbaccalaureate research assistants who did not participate in any of the social interaction tasks as an unfamiliar peer confederate and, as independent observers, were masked to adolescents' referral status and all other clinical information. The TIOs made global ratings of each adolescent's social skills and social anxiety behaviors using an extensively validated behavioral coding scheme (e.g., Glenn et al., 2019). The TIOs based their ratings on the social anxiety and social skill domains on observations of the SSIT (five ratings), UCT (one rating), and IST (one rating). TIOs completed the social skills ratings on a 5-point scale ranging from 1 (*not effective at all*) to 5 (*very effective*), where higher scores indicated greater social skills (e.g., appropriate eye contact, etc.). The social anxiety ratings were also on a 5-point scale rating from 1 (*animated*) to 5 (*severe anxiety*), where higher scores indicated greater social anxiety behaviors. For each adolescent, a pair of coders rated their social skills and social anxiety, with their ratings displaying an intraclass correlation coefficient (ICC; for average measures) of 0.78 on social skills and .75 on social anxiety, which is considered within the "excellent" range, based on thresholds recommended by Cicchetti (1994).

Further, recent work with unfamiliar untrained observers (UOs) indicates that their passive observations of adolescents' interactions—namely observations of videotaped recordings of adolescents within the UPP—yield psychometrically sound data about social anxiety and a

host of anxiety-relevant domains (e.g., subtle avoidance, fears of negative and positive evaluation, psychosocial impairments, peer relations), based on reports completed via surveys by untrained raters (see Charamut et al., 2022; Follet et al., 2023; Rezeppa et al., 2021). Prior work assessed the use of items on the Anxiety Disorders Interview Schedule for DSM-IV: Child Version (ADIS-C/A) Interpersonal Relationship Module to detect peer-related impairments among adolescents who were seeking an evaluation for social anxiety concerns (Beale et al., 2018). This study highlighted the use of a short measure being capable of assessing for peer-related impairments to social anxiety. Follet and colleagues (2023) also assessed UOs' ratings on adolescents' peer-related impairments as a function of social interaction contexts and found that their ratings related to the TIOs reports of adolescent social skills. This work highlights that adolescents display behaviors indicative of peer-related impairments in different ways and that different informants (self vs. parents vs. peers; UOs) vary from one another in their expertise for reporting peer-related impairments.

Additional work completed by Rezeppa and colleagues (2021) leveraged UOs to use the Subtle Avoidance Frequency Examination (SAFE) to rate adolescent use of safety behaviors during videotaped recordings of the UPP. The findings from this study noted that UOs reports on the SAFE related to adolescents' SAFE self-reports, distinguished adolescents on clinically elevated social anxiety concerns, related to trained independent observers' ratings of adolescent social skills within interactions with unfamiliar peer confederates, and related to adolescents' self-reported arousal within these same interactions (Rezeppa et al., 2021).

Taken together, an emerging body of work supports the use of UOs to understand adolescent social anxiety and related processes when interacting with unfamiliar peers. In particular, these UOs' reports have been shown to (a) link to reports about peer relations and

(b) link to reports about behaviors (i.e., safety behaviors) that are known to correlate to others' impressions of socially anxious individuals, their social skills, and thus effectiveness as interaction partners. In sum, prior work supports the ability of the UPP to produce data relevant to understanding how adolescents react to simulated social interactions with unfamiliar peers.

The UPP: Clinical Modifications

Importantly, the body of work in support of the UPP has been limited to its use in controlled laboratory settings. As with any clinical technique tested in controlled settings, applying the UPP to service delivery settings will require modifications to the paradigm. Beyond the basic and applied models developed to facilitate our understanding of SAD as well as the development of exposure-based therapies and the UPP, it is imperative to develop models focused on guiding the implementation of therapeutic techniques in service or applied settings.

Implementation Science: Theories, Models, and Frameworks

Implementation science is the study of processes that allow research to effectively evolve into evidence-based practices. Eccles and Mittman (2006) define implementation science as “the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice to improve the quality and effectiveness of health services and care” (as cited in Nilsen, 2015, p. 2). As a field of study, implementation science largely focuses on addressing the research-to-practice gap (Meyers et al., 2012). Implementation science has been conceptualized with theory-based, model-based, and framework-based approaches, each of which differ in focus (i.e., either dissemination or implementation), construct flexibility (i.e., the extent to components in the approach are operationally defined), and socioecological level of impact (e.g., individual level, organization level, systems level (Tabak et al., 2012)).

Regardless of scientific approach, Nilsen (2015) posits that within the field of implementation science, each approach attempts to address three core aims: (a) describing and/or guiding the process of translating research into practice; (b) understanding and/or explaining what influences implementation outcomes; and (c) evaluating implementation. The three aims of implementation science facilitate delineating categories of theoretical approaches for use in implementation science: (a) process models; (b) determinant frameworks; (c) classic theories; (d) implementation theories; and (e) evaluation frameworks (Nilsen, 2015). *Process models* map out the stages of moving research into practice, with action models offering practical implementation guidance. *Determinant frameworks* pinpoint and classify the barriers and facilitators impacting implementation results, seeking to explain these influences. *Classic theories*, borrowed from disciplines such as psychology, provide insights into change mechanisms without actively driving implementation. *Implementation theories*, created by experts within the field, refine and adapt existing theoretical ideas to enhance comprehension of implementation. Finally, *evaluation frameworks* establish structures for measuring the effectiveness of implementation projects. The current study leverages both *process models* and *determinant frameworks* (Nilsen, 2015), in that I focused on gathering feedback from experts about task implementation, while also gathering their opinions on barriers and facilitators for success. Implementation science focuses on three critical areas: (a) *promoting adoption*—helping clinicians to integrate EBPs into their clinical work; (b) *facilitating implementation*—providing essential tools, resources, and supports to put EBPs into action; and (c) *sustaining use*—establishing strategies that allow for EBPs to stay in place within clinical settings (Bauer et al., 2015; Bauer & Kirchner, 2020; University of Washington, 2025). Furthermore, the current study sought to address each of these areas and explore the effectiveness of increased clinical flexibility in exposure-based treatments for social

anxiety disorder (Georgiadis et al., 2020). Thus, models of *implementation science* may inform modifications to improve the clinical feasibility of the UPP, while still retaining the principles that informed its development.

Task-Sharing

Task-sharing is a method of using lay individuals to deliver health care services that are typically provided by licensed service providers with extensive training (e.g., physicians, psychologists, social workers; Barnett et al., 2018, 2021). These lay individuals are recruited from the local community, usually without formal professional certification, and are trained to carry out services related to health care (Shahmalak et al., 2019). Lay individuals can take on many roles, such as case managers, coaches, or a peer support system (e.g., mentors; Farkas & Boevink, 2018). Task-sharing was originally designed to expand access to health care services by redistributing service-related tasks to portions of the workforce and larger communities within which clients reside (Le et al., 2022). As such, task-sharing addresses the service needs of communities that experience persistent shortages of licensed health care workers, especially in low-and-middle income countries (LMICs), and in health care settings embedded in communities experiencing high-needs due to chronic conditions (e.g., HIV/AIDS, Type 2 diabetes, cancer; Patel et al., 2018a; Purgato et al., 2020; World Health Organization, 2015).

Germane to the aims of the current study, emerging work highlights the potential of implementing task-sharing in the delivery of mental health services (e.g., Barnett et al., 2016, 2018, 2021; Hoeft et al., 2018; Le et al., 2022). Recent examples of task-sharing in mental health services include use of lay individuals as front-line service providers in the treatment of depressive and anxiety disorders in primary care in Goa, India (Patel et al., 2018b), and when delivering brief motivational interviewing interventions for alcohol-related concerns in

Mozambique (O’Grady et al., 2022). Task-sharing not only facilitates access to mental health care, but also increases the cost effectiveness of that care (Collins et al., 2011; Lange, 2021). In fact, a systematic review by Singla and colleagues (2017) probed the effectiveness of lay individuals when implementing psychological treatments (e.g., psychoeducation, individual and group CBT) for common mental health concerns (e.g., anxiety, depression, trauma), and found it to be both cost-effective and efficacious relative to usual care in LMICS. In summary, emerging work highlights the value of lay individuals within task-sharing models of care.

The UPP serves as a candidate paradigm for the application of the task-sharing model to developing exposures that simulate adolescent clients’ social environments. In line with task-sharing models, use of the UPP involves recruiting *auxiliary staff* for their participation in social interactions with adolescents, namely as unfamiliar peer confederates. This feature of the UPP allows users to simulate a range of social contexts relevant to adolescent clients’ clinical presentations. Thus, there exists the potential for modifying the UPP, by expanding the characteristics of unfamiliar peer confederates and infusing flexibility in its administration.

Characteristics of Unfamiliar Peer Confederates

As mentioned previously, auxiliary care lay health workers typically reside in the communities requiring increased access to services. In this respect, the selection of unfamiliar peer confederates involved in the UPP can be tailored to increase relevancy of social situation and adolescent needs. These confederates can be recruited from not only local higher education institutions (e.g., community college, university), but also local grade schools (e.g., teenagers, younger children). For example, clinical settings may consider recruiting senior high school students who demonstrate an interest in psychology (e.g., enrolled in advanced psychology courses).

Training unfamiliar peer confederates could also undergo modification. Similar to the initial lab-based paradigm, unfamiliar peer confederates would be trained to learn how to respond realistically and appropriately to adolescents with SAD in commonly experienced *structured* social situations (e.g., requesting help, receiving a compliment), *unstructured* social situations (e.g., naturalistic conversations), and *performance-based* situations (e.g., public speaking) using basic scripts. Training would also reinforce unfamiliar peer confederates to perform exposures using developmentally appropriate topics of conversation and manner of speech (e.g., popular movies, slang). New to the training procedure would be efforts to also expand the unfamiliar peer confederate role from research confederate to auxiliary care workers recruited directly from the community, allowing for better representation of demographic characteristics. As such, relative to lab-based personnel, there may be a need to equip unfamiliar peer confederates with clinically relevant psychoeducation regarding SAD and principles of exposure treatment. As with training models for clinicians to learn exposure treatments (e.g., the Progressive Cascade Model; Reid et al., 2017b), training unfamiliar peer confederates might involve short, intensive workshops on basic principles of exposure treatment, as well as observations and roleplays with licensed personnel.

Once unfamiliar peer confederates undergo training, a question arises as to how they might be integrated in care. Consistent with shared decision-making models of service delivery (see Langer & Jensen-Doss, 2018), clinicians might plan exposures in collaboration with unfamiliar peer confederates. For example, when a client is ready for an *in vivo* exposure, the clinician could provide minimal introduction of the unfamiliar peer confederate, and may choose to observe the social interaction remotely (e.g., behind a two-way mirror, through a live video feed). Consistent with psychometric work on the UPP reviewed previously (e.g., Charamut et al.,

2022; Rezeppa et al., 2021), this approach would allow clinicians to collect key clinical data from a third-party perspective, while also reducing potential feelings of safety their clients may feel in their presence. Following the exposure, the unfamiliar peer confederate could exit the session, and allow the clinician to process the experience with the client, and in a manner consistent with inhibitory learning models (e.g., identify expectancy violations). Following the interaction, the unfamiliar peer confederate could make reports of their own interactions with the client, again consistent with work on the UPP (e.g., Deros et al., 2018; Glenn et al., 2019). After the session ends, the clinician and the unfamiliar peer confederate could reunite to debrief on the social interaction, and review both of their reports about the client's performance. By providing clinically relevant data that is otherwise inaccessible to the clinician during the exposure, unfamiliar peer confederates might serve as key auxiliary supports of treatment.

Tailoring *In Vivo* Exposures

As illustrated in Figure 1, the UPP aligns with clinical and conceptual models of exposure-based treatment, namely the principles that underlie inhibitory learning. The tasks embedded in the UPP simulate fear and avoidance processes that research suggests are important to capture within *in vivo* exposures (see Sewart & Craske, 2020). The tasks display heterogeneity in social situations to simulate variability in the social environment (i.e., *stimuli variability*). The tasks also provide adolescents with opportunities for observing outcomes that might confirm how they predict a social situation to transpire (i.e., *expectancy violations*). Further, the overall duration of the tasks is of a sufficiently extended period to provide opportunities for observing decreases in distress over time (i.e., *habituation*). This last feature allows for informants to observe the adolescents for a sufficient period of time to make reports about their behavior. Thus, the UPP serves as “proof of concept” that *in vivo* exposures can be constructed in

collaboration with lay health workers (i.e., unfamiliar peer confederates), and in a way that reflects current thinking on the characteristics that these exposure must harbor to ensure that they are of therapeutic benefit to the clients receiving them.

The UPP also includes a component that violates a core principle of exposure-based treatments. As a laboratory paradigm, the UPP's tasks required standardization, to ensure that participants' data are interpretable. This level of standardization conflicts with the need to tailor exposures to clients' unique needs. In this respect, generalizing the *principles* of the UPP to the service delivery setting, rather than the paradigm "as-is," should constitute the ultimate goal of its use as a task-sharing tool. To facilitate a principle-based approach requires guidance on tailoring *in vivo* exposures that include unfamiliar peer confederates. That is, rather than providing clinicians and unfamiliar peer confederates with scripts for how to conduct specific exposures, they might be provided with scaffolding for exposure development, and in a way that fosters flexibility to tailor exposure to the client's needs. The development of a manual that provides guidance on tailored *in vivo* exposures with a lay health worker such as an unfamiliar peer confederate would be imperative for effective implementation of this approach.

Benefits of a Tailored Approach to Use of Unfamiliar Peer Confederates

Expanding the role of unfamiliar peer confederates facilitates service delivery. As mentioned previously, *in vivo* exposures typically consist of the treating clinician or other clinic staff acting as interaction partners. However, the use of unfamiliar peer confederates in this auxiliary care role allows clinicians to place their emphasis on a more targeted delivery of exposure-based treatments to the symptoms that adolescents with SAD display.

As noted in Figure 1, equally important to the issue of expanded versatility in service roles among stakeholders is the issue of stimuli variability, a factor that is key to inhibitory

learning in exposure-based treatments (Sewart & Craske, 2020). For exposures to be maximally effective in bringing about lasting change in client functioning, they must accurately reflect aspects of the social environment related to the client's clinical presentation. If adolescent clients experience their symptoms and impairments in the context of unfamiliar social interactions, then a model that presents lay health workers as unfamiliar interaction partners (i.e., unfamiliar peer confederates) facilitates maintaining unfamiliarity in exposures over the course of treatment. An example of this process might involve a clinic that keeps a "rotation" of unfamiliar peer confederates available for clients, or a series of confederates that facilitate executing exposures with unfamiliar people for a caseload of clients. A tracking procedure could be implemented that allows clinicians to determine which confederates in the rotation are unfamiliar to a given client, and at a given period of their course of treatment. For instance, unfamiliar peer confederate 1 might be unfamiliar to client A at session 1 but less so later on in treatment, whereas unfamiliar peer confederates 2 and 3 might still be most unfamiliar to client A at later points in treatment. Tracking client contact with unfamiliar peer confederates over the course of treatment would allow for use of tailored *in vivo* exposures via task-sharing, and in a way that preserves the unfamiliarity of the exposures. As evidence of the feasibility of this approach, consider that in the initial sample in which the UPP was developed and evaluated, 134 adolescents were recruited for the study, and each was paired with an unfamiliar peer confederate. Over the course of seven years of study recruitment, over 60 unfamiliar peer confederates served in this role, indicating that, on average, each unfamiliar peer confederate interacted with less than 3 adolescents recruited for the study (Follet et al., 2023).

Furthermore, allowing for execution of exposures via unfamiliar peer confederates allows clinicians to observe the interaction and form hypotheses regarding the nature of the adolescent

client's behavior within these interactions. This could allow for greater insight into the client's current presenting problems and inform treatment planning. Thus, the auxiliary care role filled by unfamiliar peer confederates allows clinicians and staff additional leeway to address key elements of service delivery, beyond serving as interaction partners within exposures. Taken together, the UPP illustrates the role lay health workers as unfamiliar peer confederates might play in enhancing the degree to which therapeutic exposures simulate the social environments germane to understanding adolescent clients' clinical presentations.

Illustrative Clinical Vignette

How might the principles discussed above manifest in a clinical case? To address this question, consider Amanda, a 14 year old girl, who is referred to therapy due to reports of distress during social situations. Concerns emerged when she entered high school and experienced a notable change in her social network. Amanda reports difficulty making friends with her new classmates and she described persistent fears of negative evaluation from her peers. Her therapist seeks to design exposures around Amanda's interactions with unfamiliar students in one of her classes. Consistent with standard practice for exposure treatment implementation, the therapist provides psychoeducation regarding the rationale for exposures and plans a fear hierarchy with Amanda which includes having a brief conversation with an unknown student.

In the absence of using the UPP to guide exposure treatment implementation, the therapist encounters multiple challenges. At the time of the exposure, the therapist is unable to find an unfamiliar person to participate in the exposure with Amanda. As a result, the therapist is forced to participate in the exposure, posing as an unfamiliar student. Throughout the exposure, Amanda struggles to see the therapist as a student and instead asks tangential questions. To address these issues, the therapist must halt the exposure multiple times to address the

interjections. Further, although in the natural social environment, Amanda presents as timid and awkward, many of these behaviors are absent in the exposure, because Amanda has already seen the therapist several times before the onset of treatment (e.g., initial session, assessments, psychoeducation). Even when Amanda exhibits aspects of her clinical presentation (e.g., talking over the therapist, reduced eye contact), the therapist misses these important cues because their focus is on maintaining rapport with Amanda. Rather than processing the exposure with Amanda, the therapist is compelled to provide praise towards Amanda's performance and plans to try the exposure again next week.

Now consider how this scenario may unfold when implementing the UPP. At the time of the exposure, the therapist asks Amanda to speak to another adolescent while she observes from another space. The therapist allows the unfamiliar peer confederate to enter the office, then exits to allow the exposure to commence. To begin the exposure in a graded fashion, the unfamiliar peer confederate uses their training to gently encourage conversation about a popular TV show. The unfamiliar peer confederate also recalls from their preparatory discussion with the clinician that Amanda is challenged by answering questions about herself. With this knowledge, the unfamiliar peer confederate asks Amanda a question about herself. As the exposure continues, the therapist takes notes regarding Amanda's performance, such as that she responded to the unfamiliar peer confederate's questioning, but in doing so also exhibited distressing behaviors. The therapist ends the exposure, allows the unfamiliar peer confederate to leave, and guides Amanda in processing the experience. At the same time, the unfamiliar peer confederate completes measures of observable anxiety-related behaviors and social skills. After Amanda leaves, the unfamiliar peer confederate shares their report, which includes detection of a subtle safety behavior that was missed by the therapist. The therapist plans to address this safety

behavior in the next exposure to ensure it does not interfere with future exposures.

Purpose and Aims

Scholars have sought to increase the use of exposure via training programs, which often include addressing gaps in knowledge among clinicians (e.g., additional training in conducting *in vivo* exposures; Reid et al., 2017b). Although these programs can improve overall attitudes towards exposure-based treatment, training alone does not improve rates of implementation; practical support might also be necessary to increase use of exposure-based treatment (Trivasse et al., 2020). Beyond training, clinicians find utility in tools for constructing exposures (Becker-Haimes et al., 2017b, 2023). These findings indicate that clinicians require tools for creating *in vivo* exposures that are tailored to the unique needs of adolescent clients. To be effective, these tools must provide the support necessary to overcome practical barriers.

In this study, I took a qualitative approach to interviewing practicing clinicians, and leveraged their clinical expertise to gain insight on the feasibility of implementing the UPP in service settings. Furthermore, this study drew upon research and theory on exposure-based treatment and SAD with research and theory on an emerging model of service delivery in implementation science and global mental health in particular, namely *task-sharing*. This current project sought to merge bodies of work about implementation of task-sharing with research on the UPP—a set of standardized *in vivo* exposures designed to simulate adolescents’ social interactions with unfamiliar, same-age peers (Cannon et al., 2020). Originally developed for use in research settings, the UPP leverages task-sharing to identify *auxiliary staff* for use in social interactions with adolescents (i.e., unfamiliar peer confederates). These features allow the UPP to simulate a range of social contexts relevant to adolescent clients’ clinical presentations, and facilitate use of task-sharing to tailor or modify the UPP for use in routine service settings.

Additionally, this study sought to build on prior work of assessing clinicians' opinions and use of exposure-based treatments in their practice, and specifically focus on its use with adolescents with social anxiety. As such, a sample of practicing clinical psychologists was recruited, and their beliefs, training, and use of exposure-based treatments was assessed. An exploratory approach was used, such that qualitative interviews with clinicians who utilize in-session exposure-based treatments with socially anxious adolescents were conducted.

In these interviews, clinicians were presented with information regarding the proposed UPP clinical framework, highlighting its evidence in a lab-based setting, the use of *auxiliary lay individuals* as *unfamiliar peers* in social interactions, and the proposed modifications that could lead to using this framework in their clinical practice. Information discussed included (a) use of the UPP in a research setting, (b) application of task-sharing principles (i.e., auxiliary lay individuals as unfamiliar peers) in exposure-based therapy, and (c) a clinical vignette to demonstrate potential use. This study addressed the following exploratory aims:

- Exploratory Aim 1: Evaluate if there are organizational barriers and personal biases (e.g., environmental constraints) related to implementation of exposure-based treatments in their practice, including during treatment for SAD in their adolescent clients (e.g., Becker-Haimes et al., 2017b).
- Exploratory Aim 2: Evaluate potential barriers and facilitators to implementing the use of *auxiliary care lay individuals* (e.g., *unfamiliar peers*) in outpatient practice settings.
- Exploratory Aim 3: Solicit feedback from clinicians on the use of unfamiliar peers in clinical practice, focusing on the UPP's feasibility and clinical utility.

Chapter 2: Methods

Parent Study

The qualitative study conducted stems from a parent study approved by the Institutional Review Board (IRB) for the University of Maryland, College Park. This parent study consisted of a battery of laboratory-controlled assessments, which began with the adolescents' and their parents' completion of a computer-administered battery of survey measures using Qualtrics data collection software. Adolescent participants subsequently completed the social interaction tasks within the UPP (SSIT, UCT, and ICT) with trained, gender-matched research personnel posing as same-age peer confederates (*i.e., unfamiliar peers*). Consistent with procedures used in prior work (Deros et al., 2018; Glenn et al., 2019), these unfamiliar peer confederates (a) were undergraduate or postbaccalaureate research assistants receiving research training in the laboratory, (b) had no prior contact with the adolescent with whom they interacted, (c) were masked to the referral status of the adolescent, and (d) were masked to all other clinical information about the adolescent (e.g., scores on mental health measures). Identical procedures were administered to both groups of adolescents (*i.e., clinic-referred and community control*; see Deros et al., 2018 for further descriptions of procedures for the parent study).

Current Study: Qualitative Methodology

The current study utilized qualitative research involving thematic analysis of interviews.

Recruitment

Participants were recruited through emails, word of mouth, and from the study advertisement being placed on a listserv (see Appendix A). Participants were eligible for participation in the study if they were proficient in English, were a current licensed and practicing clinical or counseling psychologist, had clinical experience with exposure-based

treatments, and worked with socially anxious adolescents. A total of 10 participants were recruited due to the homogeneity of the expected sample. Zhostka (2025) reports that for homogeneous groups, to hit thematic saturation you only need to recruit 5-12 participants and between 8-12 participants to spot patterns in the data. Additionally, the specificity of the sample is required due to the small percentage of practicing clinicians who use exposure-based therapies to treat children and adolescents with anxiety disorders (Reid et al., 2018). Furthermore, therapists in private practice settings are more often expected to use evidence-based techniques like exposures and the use of exposure therapy is higher in samples of psychologists with specialized training in CBT (Moses et al, 2021). Each of these factors support the sample size used to address my study aims. Participants were confirmed to meet study eligibility criteria prior to scheduling the interview. Participants completed informed consent prior to the start of the interview via a Qualtrics survey form.

Participants

Participants were 10 licensed practicing psychologists (school-clinical or clinical Ph.D. or Psy.D.) who routinely used exposure-based therapy treatments for social anxiety disorders. They practiced in Maryland, the District of Columbia, Virginia, New York, or Ohio. Seven psychologists worked in private group practices, two psychologists were Clinic Directors of graduate school community-based clinics with their own private practices, and one worked in an academic medical center. Their years spent in practice post licensure ranged from 2.5 years to 26 years (see *Table 1*). All participants received training in exposure-based treatments, through their graduate school curriculum, research interests, or clinical experiences (e.g., externships, internships, or fellowships/post-doctorate placements). Additionally, all participants currently worked with adolescents with social anxiety disorders. They all reported using *in vivo* and

imaginal exposures, graduated hierarchy exposure framework, and implementing exposure homework outside of sessions. Participants were compensated \$250 for their time and responses, which is the average cost of an individual therapy session for psychologists in private practices in the DC, MD, and VA areas (Brenner, 2021).

Interview Questions

The interview was comprised of both previously published questions to assess opinions on exposures and novel questions developed for this study. Several open-ended questions were used from a qualitative interview used to assess clinicians' insights and experiences with exposure-based treatments, specifically Frank and colleagues' (2023) Teaching Exposure for Anxiety to Community Mental Health Clinicians (TEACH): Therapist Qualitative Interview. Questions regarding the feasibility and utility of the UPP in practice were created to elicit feedback from the participants. The interview was designed for completion within 60 minutes and interview times ranged from 42 to 60 minutes. Interview questions were designed to be semi-structured to allow for further discussions and clarification if needed.

Interview questions included background information (e.g., highest degree earned, number of years of practice, clients with whom they have worked: setting, populations, age groups), participants' perceptions of exposures and clinical experiences, types of exposures participants have used in their clinical practices, and if they have previously used other individuals to stand in as an unfamiliar interaction partner. Questions then transitioned to the participants identifying factors that make exposure therapy easier or more difficult to implement, along with sharing a de-identified case example for each. See *Appendix B*.

Information regarding the past implementation of the UPP in a laboratory assessment setting was then shared with the participants. Information included the structure of the paradigm

and highlights of important findings from several research studies. Next, the concept of task-sharing was defined and how *auxiliary lay health workers (ALHWs)* could be brought in to act as same-age peers under the principles of the UPP in exposure-based treatments for social anxiety. Modifications to the paradigm were noted and included additional training that would be beneficial for effective treatment. Finally, an illustrative vignette was described showcasing common issues that arise with current implementation of social anxiety exposure therapy and contrasted with how an exposure therapy session could take place with the use of an *ALHW* following principles of the UPP. Participants were asked if they had any questions or if needed any clarification or repetition throughout.

The interview questions related to the UPP included prompts to assess aspects of the following topics: feasibility and clinical utility. Areas such as ethical considerations, confidentiality, client/parent response, the practicality of the framework, cost, and insurance were considered under the theme of feasibility. Under clinical utility, prompts assessed how they believed the UPP could enhance current exposure-based treatments for social anxiety disorders with adolescents and the discussion of roadblocks that would potentially interfere with its implementation in their practice. Lastly, participants were allowed to share any additional thoughts about the proposal.

Procedure

I conducted all interviews over the Zoom platform with audio and video recordings. The audio recordings were extracted, uploaded, and transcribed through REV, a secure online AI transcription software service. I checked all of the transcriptions for accuracy. The transcriptions were then entered into NVivo 14 qualitative data analysis software, which was used to organize the data and allow for identification and coding of key themes (Lumivero, 2023). I then reviewed

each of the transcriptions and pulled themes and subthemes from the material. Then each transcript was coded according to these themes. Throughout the coding process themes/subthemes were defined, redefined, and coded.

Data Analytic Plan

Braun and Clarke's (2006) thematic analysis approach is one of the most influential and widely used approaches and aligns with my study aims. The current study followed an inductive approach, where themes from the data were gathered in the interviews, and followed semantic coding, where data was assessed at the explicit, surface-level meaning (Braun & Clarke, 2024; Naeem et al, 2023). Braun and Clarke's (2024) thematic analysis takes on a reflexive method, where a strong emphasis is on the researcher's role in the production of the themes. As an exploratory project, the reflexive method aligned best with this study's aims to allow for themes to organically arise from the data. In Phase 1, I became familiar with the data through transcription, reviewing interviews, and identifying initial themes. In Phase 2, I generated initial codes through a process of identifying salient themes and collating data to these themes. A particular area of emphasis at this phase, dependent on data collected, was feasibility and clinical utility. I continued to generate themes in Phase 3. Specifically, the *a priori* identified themes of feasibility and clinical utility was compared to the overall data. Phase 4 had a continued review of the data for themes and generating the thematic map (see *Figure 2*). In Phase 4, given that I was the only coder, I was unable to determine if an independent set of coders produced themes consistent with my own. In Phase 5, ongoing analysis was conducted to further refine themes and identify subthemes and a final codebook was established. Finally, in Phase 6, the final analysis was conducted to ensure all coding for all 10 interviews followed the codebook and a written analysis of themes and subthemes was produced.

Design Considerations

This is the first study to evaluate psychologists' clinical perspectives and feedback on the modification of the UPP and application of its principles to exposure-based treatment for social anxiety disorders, specifically with adolescents. Establishing feasibility and clinical utility are important first steps to establish areas of consideration and potential improvements to be made prior to establishing a larger evaluation of the paradigm in practice (Weisz, Jensen, & McLeod, 2005). The study aims to evaluate potential barriers and facilitators to implementing the principles of the UPP, specifically the use of ALHWs in social anxiety exposure-based treatments in a clinical practice setting.

Chapter 3: Results

Ten licensed and practicing psychologists were enrolled in the current study. The descriptive data is presented in Table 1. Of note, I did not see a pattern of participant responses that related to their years of clinical experience. All participants shared that, as they began their careers as licensed professionals, they adhered more closely to manuals, and over time, that they increased the flexibility of their treatment delivery.

Table 1

Participant Characteristics

	<i>n</i> =10
Gender	
Male	1
Female	9
Degree Earned	
Ph. D.	9
Psy. D.	1
Years of clinical practice post-licensure	
0-5	3
6-10	3
11-15	1
16-20	1
21-25+	2
Clinical Practice Setting	
Group Private Practice	7
Personal Private Practice	3
Academic Medical Center	1
University Training Clinic	2

Qualitative Interviews

Theme 1: Exposure-Based Treatments

Phrases that encompass the use of exposure treatment.

Theme 1.1 Associations of Exposures

Participants reported practical associations about exposure-based therapies, such as it being evidence-based, manualized, and response prevention. Others noted aspects of the treatment itself, like it is structured but needs careful tailoring and requires building hierarchies. More brought up the mental health concerns it addresses like anxiety, Obsessive Compulsive Disorder (OCD), and distress tolerance. Three participants shared positive sentiments about exposure treatment, such as they find it “*super fun*” and they enjoy the creativity that it can entail. One stated: “*I feel happy because that's the kind of treatment that I like doing best, so I just have positive associations.*” And another reported, “*I have never seen a disadvantage of using an exposure.*”

Theme 1.2 Components Needed for Exposure Treatments

Subtheme 1.2a Structure: Participants noted the importance of following a certain structure for successful application of exposure-based therapies. Such aspects included building rapport with clients, providing psychoeducation on anxiety and the cycle of avoidance, working in tandem with clients to establish a hierarchy that is specifically tailored for the client, and following exposures in a graduated fashion. Several shared that they will do more cognitive work upfront, such as teaching basic coping skills and cognitive restructuring. One participant reported that they will often attempt to have a “*baby*” exposure by the end of the second session.

Subtheme 1.2b Facilitators: For successful implementation of treatment, participants noted that the biggest factor for success was buy-in from the client and their parents and

motivation to follow through. Other aspects that were noted included the age of the client and their clinical presentation.

Theme 1.3 Effectiveness

All participants noted exposure-based treatments as being an effective treatment for social anxiety and other anxiety disorders. All believed that their current methods for social anxiety exposures worked well to reduce symptoms and lead to positive treatments outcomes. Many reported that they like exposure therapies because they see the difference it makes in children. Participants made such statements as: *“I really like exposure therapy because it works”* and *“when you do exposures, kids get better. So that’s a lot of fun.”* While all participants noted positive regard for exposure treatments, they did note some challenges.

Theme 1.4 Implementation Challenges

Participants reported that there are a number of aspects that make the implementation of exposure therapy difficult. These challenges and limitations are detailed below.

Subtheme 1.4a Replicability: Every participant noted that there are limitations to exposure-based therapy, and the biggest concern was not being able to accurately recreate their client’s fear within their therapy session. They expressed that certain fears and situations cannot be addressed within in-session exposures or the types of exposures they do (e.g., role playing) do not match the real situations that their clients are fearful of, such as talking to a peer. One shared: *“even if we role play, it's still me and it's still in my office and it's still in this trusting relationship. And so sometimes exposures just aren't realistic enough unless they are in real life and I'm not with them in real life.”*

Subtheme 1.4b Logistics: Time, Cost, Location: Most participants noted that there are logistical challenges that get in the way of implementation of certain exposures. One of the most

common factors identified was location, such as their offices not being near stores or places where they could have their clients practice with unfamiliar people. The cost of getting materials together for certain exposures was another issue. Cost was also associated with the general cost of a 45-minute session and how it would increase for the client if more time was needed. Time was another large factor. Several participants shared that they are booked back-to-back with 45-minute sessions, and sometimes that time constraint does not allow for a full effective exposure session: *“based on the timeframe I might have in a session, if I don't have a lot of time, then it makes it a little difficult to do an exposure effectively.”*

Subtheme 1.4c Other Therapeutic Concerns: Several participants shared that they might choose not to do exposures because there are other comorbidities, such as depression, executive functioning concerns, or other mental health diagnoses (e.g., psychosis, personality disorders). Two participants stated that they often cannot control what a client brings in, such as the client comes in with another concern that they want to focus on in session instead of participating in an exposure.

Subtheme 1.4d Client's Characteristics: Development, Motivation, Distress, and Identity: Each participant noted that there are certain client characteristics that can get in the way of best treatment. Buy-in and overall motivation for change was the most commented predictor for effective treatment according to the participants, and thus if it is missing treatment progress becomes challenging. Several shared that a client's distress levels can get in the way, as at times it would cause therapy drop out or prolonged treatment times. Some of these concerns included the child's age and overall development. For example, several participants stated that they often found working with younger children to be more difficult in exposures. Finally, one participant

mentioned that they have experienced clients who strongly identified with their mental health concern (e.g., anxiety) and did not wish to make improvements.

Subtheme 1.4e Parents: Involvement/Availability and Mental Health: Most participants noted that parents have a significant impact on treatment outcomes. Specifically, participants noted that treatment is challenging when parents are not involved, due to parent's availability or lack of motivation. Additionally, several participants shared when parents have anxiety and/or other mental health concerns (e.g., depression) it can adversely impact the outcome of exposures. One participant shared: *"sometimes parents are anxious and can't tolerate their own kid's distress, so trying to get them on board, like family accommodations is a huge, huge thing."*

Subtheme 1.4f Therapist Characteristics: Few participants noted that a therapist's own distress can impact the effectiveness of exposure treatment. If the therapist has distress around doing an exposure, their ability to effectively implement it with their client is impacted. One participant effectively put this as: *"if you're afraid of your client's anxiety, you could never hope for them not to be."*

Subtheme 1.4g Therapeutic Error: Finally, two participants noted that *"jumping the gun"* on exposure-based treatments can affect their outcomes. Specifically, they reported that if the therapist does an exposure that is too challenging for a client too soon and too fast, it can negatively impact the course of treatment.

Theme 1.5 Interaction Partners

All participants reported using other individuals at some point in time as another interaction partner during a social anxiety exposure with the client. Common individuals used were office staff, other clinicians/graduate students, and extremely few times, other kids (e.g., another kid in treatment or a family member). It is important to note that two psychologists had

training in Social Effectiveness Therapy for Children (SET-C), a social skills treatment that both leverages same-age children to serve as unfamiliar peer partners for clients and inspired the development of the UPP (Cannon et al., 2020).

Subtheme 1.5a Issues: Who and Availability: Most participants noted that they have experienced issues with bringing in others into a session. They noted that in private practice settings, another psychologist was rarely available because of scheduling conflicts. However, most participants who worked in private practice reported that they use office staff members and individuals in the waiting room, but these people are not always readily available.

Theme 2: UPP Modification for Exposure Treatments

Theme 2.1 Feasibility

Feasibility was defined as the possibility of successfully implementing this approach to delivering exposures in a clinical setting. Under this theme, several subthemes emerged.

Subtheme 2.1a Client Response: When asked to determine client's and their families potential responses to this treatment framework, participants reported mostly positive or neutral responses. The general consensus among participants was that parents would like it. Several noted that it might be seen as more realistic to their child's social anxiety concerns: *"But I think parents would be incredibly excited to have this type of treatment option available. I think the number one thing I hear from parents is that especially for kids who are having social difficulties, that they want them to have more opportunity for peer groups or peer interaction in a clinical setting."* Some participants reported that the clients might have increased anxiety, whether for a practical reason (e.g., worries about knowing the ALHW) or because it mimics the actual feared scenarios more closely. Others noted that it might be seen as treatment as usual: *"I doubt that most clients or parents would really know whether something was normal or not*

normal. So, I think that if they understood what the goals were and that they had some evidence that this type of treatment was useful, I think that most would view it positively or feel hopeful about it.” Overall, participants appeared to have positive associations with their clients and families in response to this treatment framework.

Subtheme 2.1b Ethical Concerns: When asked about potential ethical issues that could arise, all participants did not have concerns aside from assuring confidentiality from the ALHWs. Many of the participants are part of organizations that already have confidentiality agreements with their volunteers (e.g., externs/graduate students). Most said they would have the ALHWs complete some form of confidentiality training, and they would discuss the importance of HIPAA and general privacy with them. Several spoke on ensuring that client consent forms would be updated to include the ALHWs as part of treatment. Lastly, a few noted making sure that the ALHWs did not have connections to their clients already.

Subtheme 2.1c Training ALHWs: As was mentioned in the theme of *ethical concerns*, all participants noted that the ALHWs would need to be trained on confidentiality. One participant noted that it would be helpful to have a manual as to how to train the ALHWs and one stated that they would want to “*ensure that they're compliant with the protocol and don't go off the protocol without permission.*”

Subtheme 2.1d Cost-Sharing: When asked about cost for utilizing ALHWs, nearly all participants agreed that they should be paid in some way for their time. One participant noted that compensation might increase the ALHW’s understanding of the importance of their role and their commitment. However, most expressed concerns about how they would actually be able to pay ALHWs because they were uncertain about funding. Several participants offered possible solution options like charging more per session or themselves cost-sharing the session to pay

them. Whereas others noted being part of a larger system that would be able to potentially offset this cost.

Subtheme 2.1d.1 Insurance: All participants noted that they are in practices that do not accept insurance. Several hypothesized that they would still use the same billing code for their session and thus there might be no difference in billing at all: *“I think they would respond more to the title of what the treatment is and probably wouldn't care or know whether or not there were unfamiliar persons involved. So...I don't know that you would need to reframe this type of treatment as anything other than psychotherapy.”*

Theme 2.2 Practicality

When presented with the question: *Do you have any insights into the practicality of using this framework in your own practice*, participants gave mixed responses. All participants reported that they work close to universities, colleges, and schools where the ALHWs could be recruited from and that they have connections with many universities/colleges from graduate school students (e.g., externs) participating in groups. Several noted positives and excitement about the UPP framework, one participant saying *“And I would love it because I have done confederate type of work before, and I love it. It's very fun and active, and I just like the role that I take on during that”* and another sharing *“I think it's a really good idea and I think it would be super powerful because you could sort of do multiple, you could even do maybe multiple kids at the same time if you were watching in two ways.”*

Subtheme 2.2a Issues and Roadblocks: Most clinicians noted barriers to implementing the UPP framework in their practice. Some of the areas of concern are described below.

Subtheme 2.2a.1 Recruitment: One participant shared: “I think the main issue of practicality would be finding people who are available to serve as the unfamiliar peers” another wondered what motivation someone might have to participate in this way.

Subtheme 2.2a.2 Scheduling: Several highlighted uncertainty about how they would approach scheduling. One participant brought up, “it's one more schedule that needs to work out. And scheduling kids and adolescents, I've found is so hard if they're an athlete or any sort of other activities, in terms of extracurriculars. So, it's just another schedule that needs to work out” and another noted practical concerns like clients arriving late or even no shows, “there's always scheduling concerns because it's hard to guarantee exactly when in a session will start.”

Subtheme 2.2a.3 Time: A few participants shared further concerns about the time required to recruit and train the ALHWs, and they noted it as non-reimbursable work time. One participant contemplated, “So, I'm training this person, supervising them, giving them feedback on how to do it. It's easier to just do it myself. So, if they're trained by someone else, that's one thing. But to recruit them, to train them, to supervise them, it needs to have some clear benefit that I can't do in some free, not just cost-wise, but time-wise way.” Many of the participants noted that the structure of their sessions would add to an additional barrier, several of them had a client scheduled every 45 minutes.

Theme 2.3 Clinical Utility

Clinical utility was defined as the ability of a measure, treatment, or therapy to improve the ability of clinicians to effectively deliver services. Nine participants noted that the implementation of the UPP could improve current exposure-based treatments. Several participants noted that they liked the structure that the framework would provide, the control

they would have over the interaction situation, and the possibility of them being able to have more objective observations of their client. A participant shared:

“I like the structured aspects of being able to observe, be able to give the processing and give feedback afterwards. And yes, to not be the person in the exposure with the client to truly be outside of it and observing, to kind of have our clinician power to really [...] get behavioral observations, and it's really hard. So having it to be sectioned out in that way is great. [...]I think it's a more powerful exposure.”

Several noted that having a “peer” would be the most beneficial aspect as it addresses the gap that they have now in the exposure-based treatment. One participant shared: *“I think the peer component, having a peer, same-age peer is a game changer.”* Another reported:

“Well, I think for sure it seems more like ecologically valid, interacting with people who are younger, who are less trained than me, which I think is an advantage even though they would be trained in terms of not messing it up, but they still are going to be more natural and not always thinking about the therapy things. So, it could be a more authentic interaction.”

One participant stated: *“the idea of a Confederate is just, it's so much more effective than a role play because they are actually new, you're not pretending that they're new. And so, it really is an actual in vivo exposure.”*

Theme 2.4 Reactions and Solutions

All but one participant noted that the proposed framework was a good idea and several had hopes for it being implemented one day. Several of the participants shared that if it were to come to fruition that they would partake, one saying: *“I would be fully willing to do something*

like this,” and another sharing: *“If this ever becomes a thing, I’m going to sign up.”* Several participants offered possible ways to effectively implement the paradigm including a virtual or hybrid format, in a school, or just generally outside of a private practice setting. One participant shared the importance of looking at ways to continue making changes in the mental health field:

“I think it meets a need and it certainly; I think fits with where some of the trends in the field are going to be able to involve people. I think as psychologists, as more people come into the mental health field, we need to think about how to train them better and utilize them so psychologists can sort of practice at the top of their license. And this is a way to be able to do that.”

Chapter 4: Discussion

The current study examined psychologists' clinical insight and perspectives on the prospective implementation of principles of the UPP through task-sharing methods, specifically using ALHWs to stand in as unfamiliar "same-age" interaction partners. This study employed qualitative methods to examine psychologists' use and beliefs in exposure-based treatments generally and to examine the feasibility and clinical utility of the UPP in practice. The first aim of this project evaluated the presence of organizational barriers and personal biases related to implementation of exposure-based treatments in practice, including during treatment for SAD with adolescent clients. The second aim explored potential barriers and facilitators to implementing the use of ALHWs (e.g., unfamiliar peers) in outpatient practice settings. The third aim solicited feedback from clinicians on the use of unfamiliar peers in clinical practice, focusing on the UPP's feasibility and clinical utility. Given the preliminary and exploratory nature of this study, it provides the initial perspectives of these aims in a selected sample of licensed psychologists.

All participants completed semi-structured interviews that I audio and video recorded over Zoom. Broadly, all participants reported positive associations with exposure-based treatments. Every participant reported that exposure-based treatment is one of the most effective forms of treatment for anxiety concerns. However, all identified some limitations to this type of treatment, such as buy-in from the clients and their parents, parental involvement, and replicability. In fact, replicability of exposures was a key limitation for exposure-based treatments of adolescents with SAD. Several participants noted that they cannot do *in vivo* exposures in sessions because they do not have access to a same age peer; thus, they might employ role playing of scenarios and the assignment of the exposure for homework. As all

participants had previous experience with the use of exposure-based treatments and had insights into possible ways of implementing the UPP in their practice, there would likely not be a specific level of experience required to incorporate the UPP into exposure practices. Furthermore, participants raised challenges that aligned with prior work on the barriers that clinicians generally endorse about implementing exposure-based treatments, such as the lack of resources or materials for conducting exposures, time to deliver exposures, and the availability of peers to serve as interaction partners (Becker-Haimes et al., 2017b, 2020; Frank et al., 2023; Reid et al., 2017a; Sars & van Minnen, 2015). Given that a clinician's own anxiety and emotional sensitivities to the implementation of exposure-based treatments can impact its use (Harned et al., 2013), future work should probe these perceived barriers and concerns, and identify modifiable factors for incorporating the UPP in therapy.

An important issue raised by participants involved the use of the ALHWs as “peers” in treatment and assurances that they would understand and maintain confidentiality. The topic of confidentiality for group therapy, peer-support programs, and the use of lay health workers has been addressed in the greater literature (e.g., Akatukwasa et al., 2025; Bernard et al., 2008; Coleman, 2005; Glenton et al., 2013; Slovenko, 1977; White et al., 2019). Yet, relatively little has been put forth on specific practices to implement that address confidentiality. Ideas for these practices appear in related literatures. For instance, in the delivery of group therapy, therapists have the group members create a confidentiality agreement within the group, acknowledge the importance of maintaining confidentiality, and highlight the consequences for breaking confidentiality (Bernard et al., 2008). When conducting 12-step self-help groups, members are told that their statements in the meetings will remain confidential (Coleman, 2005). That said, these practices do not necessarily guarantee confidentiality. In the context of group

psychotherapy, the law states that disclosures in the presence of other parties do not fall under the same guidelines of the maintenance of confidentiality (Slovenko, 1977). In the literature surrounding the use of lay health workers, there are concerns about the ability to maintain confidentiality (Akutukwasa et al., 2025; Glenton et al., 2013). In studies that have used ALHWs to test the efficacy of their ability to carry out treatment, there has been emphasis on the importance of them being trained in confidentiality, role boundaries, and behavior change techniques (White et al., 2019). The training included scenarios about confidentiality and maintenance of appropriate boundaries being used during the interview process, and the ALHWs had to sign a volunteer agreement to uphold confidentiality (White et al., 2019). Thus, the recommendations put forth by the participants in this study—that they would ensure that the “peers” had substantial training in confidentiality, that they would have the ALHWs sign agreements prior to their participation in treatment, and that they would tailor the informed consents for their clients—aligns with considerations of confidentiality in related literatures.

Overall, the responses from the participants’ interviews suggest that many saw that the proposed framework of the modified UPP could bring important clinical benefits to social anxiety exposure-based treatments. Although they provided positive feedback about the UPP, they also identified a few potential obstacles. One of the major points of concern expressed was the process of recruiting, training, and effectively integrating (e.g., scheduling) ALHWs into treatment. The topic of cost was another factor that evoked hesitancy from participants, specifically uncertainty about how they would compensate the ALHWs. While these barriers were identified, several participants readily suggested workarounds, such as establishing a hybrid format and having a scheduling system available to select them from.

Participants reported their current methods of exposure-based treatment to be very effective in the treatment of social anxiety concerns with adolescents, but noted that the UPP framework could improve these treatments. An interesting finding was that the participants did not perceive some of the concerns presented in the interview (i.e., confidentiality/consent, families responses, and insurance) as major issues to overcome. In fact, several participants confidently expressed that these potential challenges could be addressed with simple solutions that were already established in their practices.

Importantly, the proposed UPP framework encompasses components put forward from Georgiadis and colleagues' (2020) Strategic Flexibility Model, which is a heuristic framework for determining what tailoring should individual therapists make to evidence-based practices for their clients. This model encourages therapists to consider:

“(1) *who* warrants treatment flexibility?; (2) *what* treatment components merit flexibility, and what modifications can be applied?; (3) *when* in treatment is flexibility warranted?; (4) *where* (i.e., in what settings) is flexibility needed, and where (in what settings) can flexibility be applied?; and (5) *why* (i.e., to what end) should flexibility be applied under specific circumstances?” (Georgiadis et al., 2020, p. 215).

Creating a clinical modification of the UPP aligns with the Strategic Flexibility Model in several ways. For instance, the “who” or focus of the UPP, adolescents, are at a critical period of social development and current methods do not adequately address their concerns. Further, the “what” or focus of services, exposure-based therapy and the types of *in vivo* exposures delivered in therapy, must be flexibly tailored to be realistic (i.e., having ALHWs as the *unfamiliar peers*).

Taken together, participants' responses regarding clinical modifications of the UPP aligned with prior work on considerations that should inform flexible delivery of mental health services.

The proposed UPP framework showcases how clinicians can flexibly adapt the current evidence-based practice of exposure therapy to best benefit their clients. Through the use of implementation science task-sharing principles (i.e., using *ALHWs* as unfamiliar peers) it allows for the increased replicability of social situations that adolescents find themselves in on a daily basis. Whether clinicians implement the UPP as an assessment tool to understand their clients' social anxiety, or decide to implement them within therapeutic exposures over the course of their treatment sessions, the use of the ALHWs has an added benefit. Thus, it increases the flexibility that a provider has when tailoring exposures for their client and addresses a current gap that is seen in current methods for social anxiety exposure-based treatments with adolescents.

Limitations

Despite the promising findings of the current study, there are several limitations that hinder the generalizability of the results. A noteworthy limitation is the homogeneous small sample size of the participants. All participants were doctorate-level licensed psychologists who received training in the implementation of exposure-based treatments. The participants are highly specialized clinicians whereas most of the mental health providers are masters level clinicians who on average receive less specialized training (Baker et al., 2009). Additionally, most participants lived in and practiced within affluent communities in a limited geographical area and their services were private pay and costly to their clients. Furthermore, most participants were part of group practices where they have access to resources and funding to be able to implement their therapeutic techniques; and thus, the insight into the implementation of the project in other settings, such as a school, hospital or community-based practice is limited. However, it is

important to note that most of the participants were located in the DC, MD, and VA area, within driving distance to the University of Maryland, where this paradigm was initially created and could potentially be initially implemented.

It is possible that participants' responses were impacted by the high-resourced nature of the sample. Most participants worked in private practice settings that did not accept insurance; an indirect sign that they served relatively affluent populations. Thus, participants' responses about exposure-based treatments or the UPP may differ from other psychologists who work in low-resource communities and may encounter greater barriers maintaining fidelity to exposure-based interventions. For example, psychologists from low-resource communities may experience greater issues of access, such as the actual physical location of services (e.g., primary care settings, telehealth), and barriers, such as transportation, language, and cost (Weersing et al., 2022). These challenges could hinder effective treatment in general and may lead to additional complications integrating a new form/addition to treatment (Weersing et al., 2022).

Another limitation pertains to the overall structure of the interview. During the interview, I read the information about the UPP, implementation science task-sharing principles, and how the use of ALHWs could modify current exposure-based therapy practices to the participants. Thus, the participants only had limited time to process the information of the UPP Modified Framework which could have prevented them from providing more in-depth responses. Additionally, since areas such as ethical considerations, confidentiality, client/parent response, the practicality of the framework, cost, and insurance were considered under the theme of feasibility, coverage of these areas might have been relatively limited during the interviews, relative to other areas that were afforded greater coverage (e.g., experiences with exposure-based therapy). Future studies could include a visual, like a flyer or video of the UPP as it was

administered in the laboratory setting, to potentially allow for greater understanding and processing of the information. This information could be provided prior to the interview for review or to show alongside an explanation during the course of the interview. Important areas such as those considered above should be elaborated on to allow for additionally probing for answers. Additionally, the interview had questions that could not be realistically answered because they were not applicable to the participants' experiences, such as questions related to insurance reimbursement.

Another concern is that I was the only coder and theme creator for the project. Due to this, there was an inability to judge whether other coders would have uncovered similar themes (Campbell et al., 2013). To reduce the potential for bias, future studies would benefit from including additional coders to discuss the theme creation and develop consensus on coding the data. Also, additional coders would be beneficial to collaboratively identify common themes and present ideas for future directions. For example, utilizing coders with different clinical experiences (e.g., undergraduate trainees) could allow for novel perspectives with regards to theme identification. However, the general susceptibility to researcher bias and findings being dependent on their researcher's knowledge and skills are general shortcomings that can be found for qualitative research (Lim, 2025).

Future Clinical Directions

Based on the results of this study, one future direction of this would be to address the barriers to implementation that the psychologists identified, such as establishing who would recruit and train the ALHWs, creating a simple and logistic way to schedule them for exposure-based sessions, and implementing the proposed framework. This could be done by establishing a relationship with a research lab at a university, who would recruit undergraduate students to be

the ALHWs and train them on the basics of confidentiality and the current UPP protocol, and a clinical practice (e.g., training clinic or local private practice). The practicing clinician could supply additional education on confidentiality, their privacy practices, and psychoeducation on exposure-based treatments for social anxiety.

Furthermore, as this study focuses on the efficacy of exposure-based treatments and how the addition of the UPP could be an effective addition to treatment for socially anxious adolescents, future work would need to explore the feasibility of incorporating the UPP into current exposure-based treatments. The criteria for whether the UPP would be a valuable addition to service delivery would need to be determined, including for where, for whom, and when it would be appropriate to be incorporated into services. Future empirical work might involve assessing the effectiveness of exposure-based treatments (treatment as usual) compared to the modified UPP framework and ALHWs presence in exposure-based treatment.

Furthermore, a future study should look at the implementation of the UPP within exposure-based treatments within low-resource community settings, like primary care or community clinics. The outcomes of such a study might inform implementation of the framework in other service delivery settings, such as in schools and hospitals. Schools would be an optimal place to consider implementing the UPP, given the ready availability of peers to facilitate client exposures, and prior work has shown that school-based cognitive-behavioral interventions for anxiety is effective (Schoenfeld & Janney, 2008). Additionally, the majority of children and adolescents with mental health concerns often do not have the opportunity to receive treatment; thus, the possibility of implementing treatments in schools might mitigate this gap (Girio-Herrera et al., 2019). Furthermore, schools may be open to assistance with implementing treatments because they recognize the need to help manage emotional and behavioral concerns of their students, and

they report limited knowledge and access to resources for how to best support them (Vaughn et al., 2022). However, barriers such as lack of support from school administration, inability of parents to participate due to competing demands during school-hours, and adolescent's extra-curricular schedules, still exist in these settings (Girio-Herrera et al., 2019). Successful implementation would require therapists cultivating relationships with schools through open communication with key administrators, designating liaisons for the teams to serve as points of contact, providing written materials about the intervention and issues surrounding confidentiality, and strengthening interpersonal relationships (Girio-Herrera et al., 2019).

Another future direction would be to train and assess actual adolescents in the proposed framework. The current methods have only been completed with undergraduates and postbaccalaureate students acting as same-age peer adolescents, but it is unknown if these results would be replicated with adolescent confederates. Such research could also address the following topics: Potential training modifications for younger confederates, how to present psychoeducation about confidentiality, and practical ways to address scheduling and overall implementation of the modified UPP. Further, implementing the UPP with same-age unfamiliar peers during *in vivo* exposures would address the gaps in clinical practice highlighted by participants in this study (i.e., *Subtheme 1.4a Replicability*, *Subtheme 1.4b Logistics*, *Subtheme 1.5a Issues: Who and Availability*).

Qualitative analyses suggest that practicing psychologists find the modified UPP treatment framework to be a feasible and clinically useful method for the treatment of SAD in adolescents. The framework could possibly provide therapeutic benefits to adolescents with SAD. Although the framework may require some logistical adjustments prior to its implementation, it is grounded in exposure-based principles for the treatment of SAD and has the

potential to addresses a current gap in clinical practices.

Reflexivity Statement

Lauren Keeley: L. Keeley is currently a clinical science psychology doctoral student whose research focuses on evidence-based treatments, namely exposure therapy, for social anxiety disorders in the adolescent developmental period. Her graduate and clinical training has centered on the use of evidence-based practices for the treatment of mental health concerns, namely those associated with anxiety. Through her research, she aims to enhance the clinical effectiveness and efficacy of in-session exposures through the principles of implementation science, namely task-sharing through the incorporation of auxiliary lay health workers as unfamiliar interaction partners. L. Keeley acknowledges the risk of bias stemming from her training and therapeutic framework.

Appendices

Appendix A

Hello!

My name is Lauren Keeley, and I am a doctoral candidate in the clinical psychology program at the University of Maryland, College Park. I am seeking your assistance with my dissertation study by inviting you to participate in a study assessing clinical feasibility in the implementation of a social anxiety exposure-based paradigm into clinical practice.

This study has been approved by the University of Maryland, College Park IRB (IRB#469857-49) and is supervised by Dr. Andres De Los Reyes, Ph.D. (adlr@umd.edu).

Eligibility Criteria:

You are eligible to participate in this study if you are:

- (a) 18 years of age or older
- (b) are proficient in English
- (b) are a current clinical or counseling psychologist (Ph.D. or Psy.D.)
- (c) have clinical experience with social anxiety exposure-based therapies

What to Expect:

Your participation will involve hearing an overview of the proposed paradigm, including a brief vignette and answering questions related to your clinical expertise and opinion on the feasibility and clinical utility of this paradigm in social anxiety exposure-based therapies.

The process will take approximately **45-60 minutes**. You will be compensated \$250 for your time and contribution.

Participation is entirely voluntary, and you may discontinue without penalty. If you want to participate, please email me at lkeeley@terpmail.umd.edu. If you have any questions, please contact me directly (lkeeley@terpmail.umd.edu) or my PI (adlr@umd.edu).

Thank you for your time and consideration. Your assistance is invaluable to the success of this research, and I sincerely appreciate it.

Sincerely,
Lauren Keeley
Doctoral Candidate, University of Maryland, College Park

Appendix B

Qualitative Interview - Instructions and Questions

Note - some questions taken from Frank and Colleagues' 2023 Teaching Exposure for Anxiety to Community Mental Health Clinicians (TEACH): Therapist Qualitative Interviews - these questions will be italicized

Introduction: "Thank you for agreeing to meet with me today for our interview! I anticipate this interview to take approximately 45-60 minutes.

During this interview, I would like to start by hearing about your own experiences with exposure therapy in your clinical practice, specifically when you have delivered these treatments to adolescent clients and to address their social anxiety.

Then I will share some information with you regarding the Unfamiliar Peer Paradigm (UPP). This is a paradigm developed for use within in-session exposures and utilizing techniques informed by implementation science, namely task-sharing. First, I would like to share with you an overview about the findings during the paradigm's initial lab-based testing. I will then provide you with a conceptual framework for how to utilize the UPP when delivering exposure-based treatments for adolescents with social anxiety, accompanied by an illustrative vignette.

After I provide you with an overview of the UPP, I would like your feedback about the paradigm, and in particular your clinical insight into the feasibility of its implementation in clinical settings. I would like to hear about aspects of the paradigm that you believe could benefit the delivery of exposure therapy to adolescents with social anxiety. I would also like to hear about aspects of the paradigm that might face pose barriers to its implementation. Overall, I would like to better understand the feasibility and fit of the UPP in exposure therapy, given your clinical experience and expertise.

I will be audio recording this interview so it can be transcribed later. Any identifiable information will be removed from the transcript. Quotes from your interview may be used in this dissertation project and future publications; however, the quotes will not be attached to your name and will be grouped with quotes from other clinicians.

Any time you want to stop the interview or have me turn off the recording, you can tell me, and we will stop.

Do you have any questions before we begin?

Interview:

We know that regularly using exposure can sometimes be difficult. There are probably advantages and disadvantages to using exposures. Today, I will ask about your perceptions of the training you received in exposure therapy, as well as your experience with using exposures in clinical practice.

It's important for you to know that there are NO right or wrong answers. We are interested only in your opinions and perceptions.

Background: Perceptions of exposures and clinical experience

1. Highest Degree Earned (e.g., Psy.D., Ph.D.):
2. Years spent in clinical practice:
3. Tell me about the kinds of clients you work with.
 - a. Settings you have worked in:
 - b. Populations you have worked with:
 - c. Age groups you have worked with:
4. *When you hear the phrase "exposure therapy," what thoughts come to mind?*
5. Did you receive training in exposure therapy?
6. *Tell me about your experiences and perceptions of using exposures with your clients.*
 - a. *[Optional Probes:*
 - i. *How do you incorporate them?*
 - ii. *Are there elements of exposures that you particularly like or dislike?*
 - iii. *Are there advantages or disadvantages to using exposure?]*
 - b. When delivering exposure therapy to treat social anxiety disorder, what types of in-session exposures have you utilized (e.g., in vivo, imaginal, virtual reality exposure, graded exposures, flooding, systematic desensitization, etc.)?
 - c. When during the course of an exposure therapy do you tend to use in-session exposures (e.g., only at the beginning, throughout)?
 - d. When you construct in-session exposures, who typically "stands in" as the other person or people with whom the client interacts?
 - e. When constructing in-session exposures, have you asked other individuals (e.g., work colleagues, clinic staff, lay individuals) to participate? That is, "stand in" as interaction partners within the client's exposure?
7. Do you have any concerns about exposure therapy (e.g., perceiving it as harmful, unethical, or intolerable as it involves intentionally encouraging individuals to experience distress)?
8. *What are some challenges that you have encountered when implementing exposure therapy?*
 - a. *[Optional Probes:*
 - i. *Are there any client characteristics that make it particularly hard?*
 - ii. *Anything about your organization that makes it hard?*
 - iii. *Anything about the amount of time you have to prepare?*
 - iv. *Is there anything that makes it hard for you personally/emotionally?*
 - v. *Is there anything related to the procedures of completing exposures that makes it difficult to use them?]*
9. *What are some factors that make it easier to use exposures?*
 - a. *[Optional Probes:*
 - i. *Are there any client characteristics that make it easier?*
 - ii. *Anything about your organization?*
 - iii. *Is there anything that makes it easier for you personally/emotionally?*
 - iv. *Is there anything related to the procedures of completing exposures that makes it easier to use them?]*

10. Tell me about a representative client (if more than one anxious client) with whom you used an exposure(s), including the client's age and diagnosis.
 - a. [Optional Probes:
 - i. What made you decide to use an exposure with this particular client?
 - ii. How did it go? What made it successful or not successful?
 - iii. How did you tailor the exposure to this particular client?
 - iv. How did you decide when the client was ready to start working on the exposure in session?
11. Tell me about an anxious client with whom you decided not to use exposures or with whom exposures were unsuccessful.
 - a. [Optional Probes:
 - i. What made you decide not to use an exposure with this particular client?
 - ii. What do you think would have happened if you had used an exposure with this client?]

Summary and Findings:

- The Unfamiliar Peer Paradigm (The UPP) - originally a laboratory assessment tool designed to simulate how adolescents react to interactions with same-age unfamiliar peers. Functionally, they have been tested as in vivo, controlled simulations and without the assistance of a therapist.
 - Three social interaction tasks
 - Simulated Social Interaction Test is a structured role-play task where the adolescent and an unfamiliar interaction partner interact in six different social situations
 - The Unstructured Conversation Task is an unstructured role-play where the adolescent and an unfamiliar interaction partner spoke with one another for 3 minutes following the prompt of the adolescent being new to school and not knowing anyone.
 - The Impromptu Speech Task is a standardized task where the adolescent spoke in front of an audience of 3 individuals (1 research assistant and 2 unfamiliar peer confederates) about three predetermined topics
- A key feature of the UPP is the involvement of lay individuals or research volunteers with minimal-to-no clinical experience within these interactions. In keeping with task-sharing approaches, the interaction partners who are embedded in the UPP require relatively little training to “stand in” or act as unfamiliar peer confederates.
 - In our initial tests, these research volunteers consisted of youthful-looking undergraduate and post-baccalaureate research assistants who received training to act as same-age adolescents
 - The minimal training needed to prepare volunteers for the tasks provided us with a sense that this approach might be “scaled up” using principles of task-sharing.
- As with in-session exposures within courses of exposure therapy, in our work the UPP has served as a crucial source of data about adolescents' reactions to interacting with unfamiliar peers. Throughout the tasks, we collect data from adolescents about how they feel or their level of arousal. We also collect data about adolescents' reactions from a series of other informants. This has allowed us to determine whether the task produces

reactions that relate to how adolescents think, feel, and behave outside of these interactions, or when observed by informants outside of the laboratory setting.

- The use of the UPP in our research lab has had a number of research findings, such as:
 - (a) Adolescents' arousal levels within the UPP relate to surveys of how adolescents behave outside of the laboratory, as taken from various informants like parents and adolescents:
 - Karp et al., 2018 - on fear of positive evaluations
 - Qasmieh et al., 2018 - on safety behaviors
 - Rausch et al., 2017 - depression and social anxiety
 - (b) We have demonstrated that data from the UPP as indexed using behavioral ratings from trained independent observers relate to how adolescents behave outside of the laboratory, and on a host of anxiety-related domains:
 - Botkin et al., 2021 - fears of negative and positive evaluations
 - Glenn et al., 2019 - social anxiety
 - Cannon et al. 2020 - safety behaviors
 - Greenberg & De Los Reyes, 2022 - co-occurring social anxiety and ADHD
 - (c) Not only can we extract useful data from trained independent observers, even untrained observers of our video archives, and based on their reports on parallel versions of the same surveys that parents and adolescents complete, can provide data that complement those provided by parents and adolescents:
 - Rezeppa et al. 2021 - safety behaviors
 - Follet et al., 2023 - peer-related impairments
 - Charamut et al. 2021 - social anxiety, fears of negative evaluation, depression, psychosocial impairments
 - (d) Crucially, beyond their role as interaction partners, our research has revealed that the volunteers who serve as peer confederates can, with no training to do so, act as informants or data sources to complement the clinical data traditionally provided by adolescents and their parents. This has allowed us to capitalize on the observations of adolescents by informants other than their parents, and help us understand how others see adolescents within situations that parents might hear about from their adolescents but rarely have the capacity to witness first-hand.
 - Deros et al. 2018
 - Makol et al. 2020
 - Makol et al. 2025

Modifications

- Through the use of implementation science, specifically using task-sharing principles, the unfamiliar peer confederates will serve as *auxiliary staff*, acting as the unfamiliar social partner in social anxiety exposures
- Task-sharing is a method of using lay individuals to deliver health care services that are typically provided by licensed service providers with extensive training (e.g., physicians, psychologists, social workers; Barnett et al., 2021).
- Task-sharing was originally designed to expand access to health care services by redistributing service-related tasks to portions of the workforce and larger communities within which clients reside (Le et al., 2022)

- Task sharing has been used within the U.S. for some time in the form of 12-step programs for substance use. But, the last couple of decades has seen a remarkable "scaling up" of the approach in parts of the developing world that do not have the resource capabilities to connect clients with licensed providers.
- This means that task-sharing has led to clients benefiting from the delivery of evidence-based therapies, with key components of these therapies made possible by the assistance of lay individuals. We can think of these models of service delivery in a variety of ways, but within the context of using the UPP, task-sharing can be seen as a way to infuse lay individuals into exposures in order to make exposures maintain the 'unfamiliarity component' that is essential when trying to simulate how clients interact with people they do not know.
- In our lab, we recruited undergraduate students, but there is feasibility for them to be recruited from local higher education institutions or grade schools
- They would be trained on how to respond realistically and appropriately to adolescents with social anxiety in everyday social and performance-based situations using basic scripts.
 - Training would include using developmentally appropriate topics of conversation and manner of speech (e.g., popular movies, slang).
- A new addition to the training procedure would include the need to equip unfamiliar peer confederates with clinically relevant psychoeducation regarding SAD and principles of exposure treatment.
- Clinicians might plan exposures in collaboration with unfamiliar social partners.
 - For example, when a client is ready for an in vivo exposure, the clinician could provide minimal introduction of the unfamiliar social partner, and may choose to observe the social interaction remotely, like behind a two-way mirror, through a live video feed).
 - This approach would allow the clinician to collect key clinical data from a third-party perspective, while also reducing potential feelings of safety their clients may feel in their presence.
 - Following the exposure, the unfamiliar social partner could exit the session, and allow the clinician to process the experience with the client, and in a manner consistent with inhibitory learning models (e.g., identify expectancy violations).
 - Following the interaction, the unfamiliar social partners could make reports of their own interactions with the client
 - After the session ends, the clinician and the unfamiliar social partner could meet to debrief on the social interaction, and review both of their reports about the client's performance.
- Thus, these modifications would be about generalizing the principles of the UPP to use in clinical practice, rather than the paradigm "as-is"
 - The clinician would still tailor the in vivo exposures, and how the unfamiliar social partners would fit in.
 - Clinicians could provide scaffolding for exposure development, and in a way that fosters flexibility to tailor exposure to the client's needs.

Illustrative Clinical Vignette:

How might the principles we discuss manifest in a clinical case? To address this question, consider Amanda, a 14 year old girl, who is referred to therapy due to reports of distress during social situations. Concerns emerged when she entered high school and experienced a notable change in her social network. Amanda reports difficulty making friends with her new classmates and she described persistent fears of negative evaluation from her peers. Her therapist seeks to design exposures around Amanda's interactions with unfamiliar students in one of her classes. Consistent with standard practice for exposure treatment implementation, the therapist provides psychoeducation regarding the rationale for exposures and plans a fear hierarchy with Amanda which includes having a brief conversation with an unknown student.

In the absence of using the UPP to guide exposure treatment implementation, the therapist encounters multiple challenges. At the time of the exposure, the therapist is unable to find an unfamiliar person to participate in the exposure with Amanda. As a result, the therapist is forced to participate in the exposure, posing as an unfamiliar student. Throughout the exposure, Amanda struggles to see the therapist as a student and instead asks tangential questions. To address these issues, the therapist must halt the exposure multiple times to address the interjections. Further, although in the natural social environment, Amanda presents as timid and awkward, many of these behaviors are absent in the exposure, because Amanda has already seen the therapist several times before the onset of treatment (e.g., initial session, assessments, psychoeducation). Even when Amanda exhibits aspects of her clinical presentation (e.g., talking over the therapist, reduced eye contact), the therapist misses these important cues because their focus is on maintaining rapport with Amanda. Rather than processing the exposure with Amanda, the therapist is compelled to provide praise towards Amanda's performance and plans to try the exposure again next week.

Now consider how this scenario may unfold when implementing the UPP. At the time of the exposure, the therapist asks Amanda to speak to another adolescent while she observes from another space. The therapist allows the unfamiliar peer confederate to enter the office, then exits to allow the exposure to commence. To begin the exposure in a graded fashion, the unfamiliar peer confederate uses their training to gently encourage conversation about a popular TV show. The unfamiliar peer confederate also recalls from their preparatory discussion with the clinician that Amanda is challenged by answering questions about herself. With this knowledge, the unfamiliar peer confederate asks Amanda a question about herself. As the exposure continues, the therapist takes notes regarding Amanda's performance, such as that she responded to the unfamiliar peer confederate's questioning, but in doing so also exhibited distressing behaviors. The therapist ends the exposure, allows the unfamiliar peer confederate to leave, and guides Amanda in processing the experience. At the same time, the unfamiliar peer confederate completes measures of observable anxiety-related behaviors and social skills. After Amanda leaves, the unfamiliar peer confederate shares their report, which includes detection of a subtle safety behavior that was missed by the therapist. The therapist plans to address this safety behavior in the next exposure to ensure it does not interfere with future exposures.

Interview Questions:

Theme: Feasibility - the possibility of successfully implementing this approach to delivering exposures in a clinical setting.

The following questions will focus on the feasibility of utilizing lay individuals in the UPP framework in a clinical setting.

1. Do you have current ethical concerns with using the proposed framework in your own clinical practice? Please describe:
 - a. How do you think clients, their parents, and others would respond to this treatment framework?
 - b. How would you address confidentiality with the unfamiliar peers (i.e., the auxiliary lay health individual)?
2. Do you have any insight into the practicality of using this framework in your own practice?
 - a. Do you have the means (e.g., geographical distance to universities/colleges) to implement such a paradigm in your practice?
3. In your experience, what are your concerns about implementing this paradigm with a client who is seeking insurance reimbursement?
4. Given the UPP's framework for utilizing lay health workers, what questions or concerns about cost do you have?

Theme: Clinical Utility - the ability of a measure, treatment, or therapy to improve the ability of clinicians to implement effective delivery of services.

The following questions will focus on the clinical utility of lay individuals in the UPP framework in a clinical setting.

1. How effective do you believe your current implementation of exposure therapy to be with your work on social anxiety disorders? With adolescent clients?
2. Are there aspects of the UPP that you believe would enhance your ability to use exposure therapy in your clinical practice?
3. What additional roadblocks do you foresee if you were to implement the UPP in your practice?

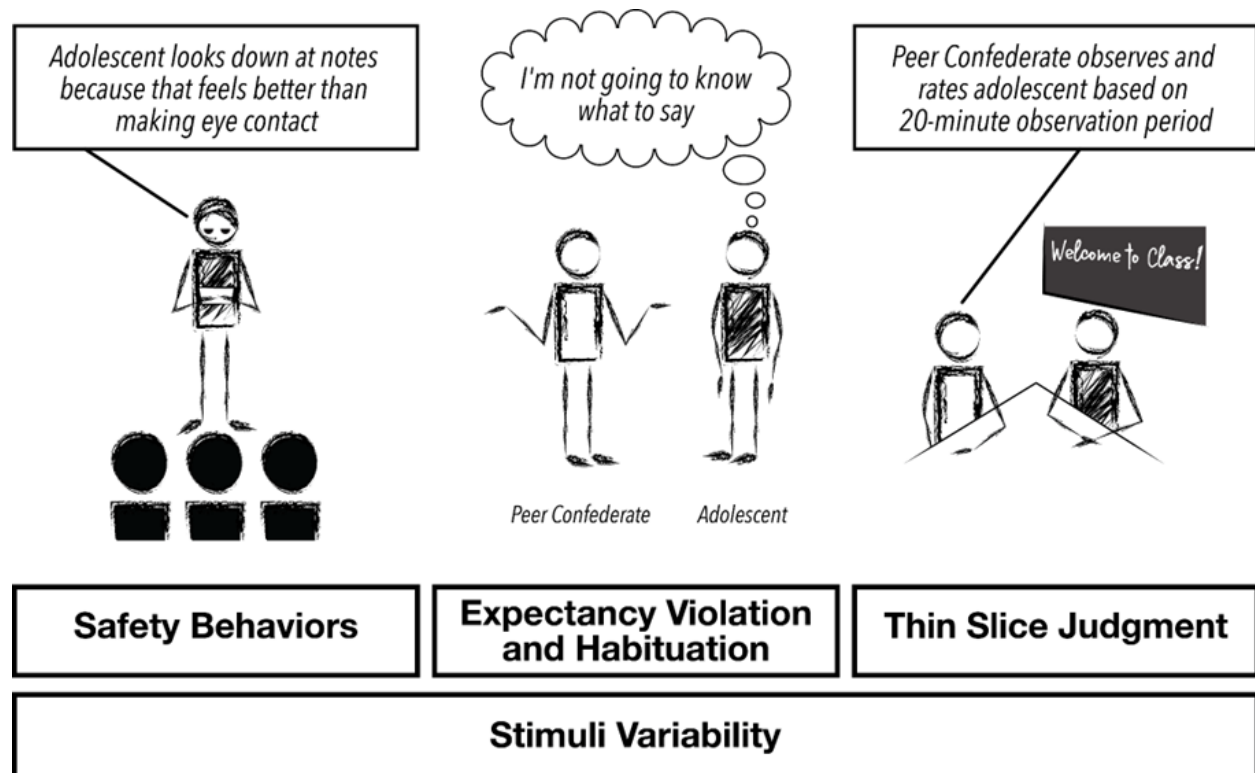
Concluding Question

1. Do you have any additional thoughts about this proposal?

“Thank you for taking the time to speak with me today and providing your clinical experiences and expertise in relation to utilizing lay individuals in exposure therapy for social anxiety concerns in adolescents.”

Figure 1

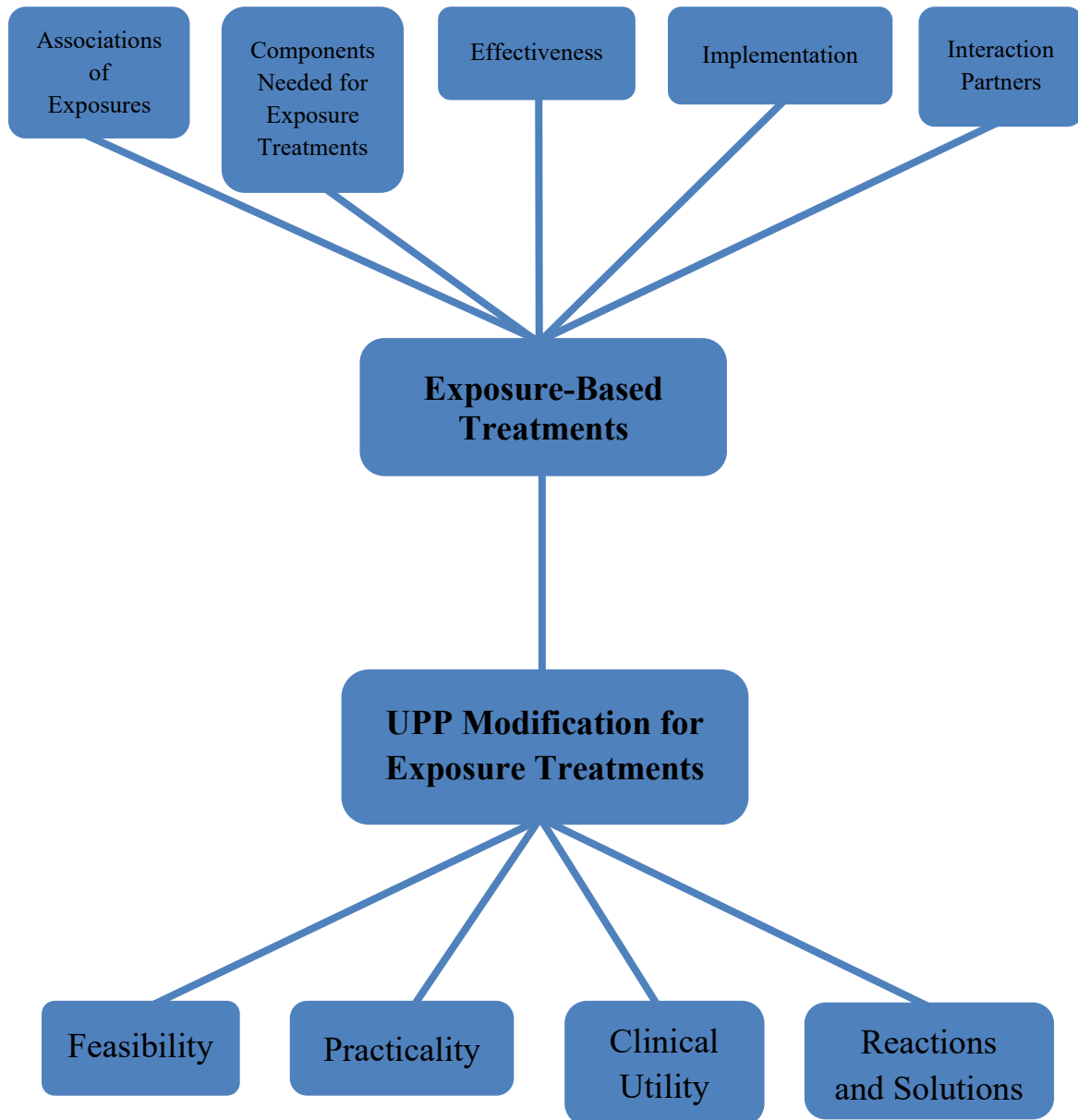
Example of Unfamiliar Peer Paradigm



Note. Reproduced from Cannon et al. (2020): Graphical depiction of the conceptual and empirical foundations of the Unfamiliar Peer Paradigm. The Unfamiliar Peer Paradigm's origins lie in research and theory in clinical psychology on mechanisms of change in exposure-based therapies, namely work on clients' use of safety behaviors during therapeutic exposures, the need to consider stimuli variability or the degree to which exposures vary on key elements of anxiety-provoking situations, and the importance of expectancy violation and habituation processes in therapy. The paradigm's origins also lie in research and theory in personality and social psychology on thin slice judgments, or the ability to gather clinically useful information about adolescent social anxiety based on the small "samples" of behavior displayed during tasks within the paradigm.

Figure 2

Thematic Map Analysis



Note. Highlight of major themes and subthemes.

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