

Counseling Interventions for Suicide Prevention Among Youth in the United States: A Comprehensive Review of Psychosocial Risk Factors

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ABSTRACT

Background: Suicide remains the second leading cause of death among youth aged 10-24 years in the United States, with rates continuing to rise despite prevention efforts. Understanding current counseling intervention practices and factors associated with treatment effectiveness is critical for improving suicide prevention outcomes among this vulnerable population.

Objective: This study examined counseling interventions for youth suicide prevention, identified psychosocial risk factors prioritized by mental health professionals, and determined factors associated with treatment effectiveness.

Method: A quantitative cross-sectional survey was administered to 364 licensed mental health professionals across the United States. Data were collected on intervention approaches, psychosocial risk factor assessment practices, protective factors emphasis, treatment outcomes, counselor characteristics, and barriers to effective intervention. Hierarchical multiple regression and correlational analyses were conducted to identify predictors of treatment effectiveness.

Findings and Implications: Cognitive-Behavioral Therapy and Dialectical Behavior Therapy were most frequently utilized, with DBT demonstrating superior effectiveness. Specialized training, protective factors emphasis, and barrier severity emerged as significant predictors of treatment effectiveness, explaining 47% of outcome variance. Results inform training programs, organizational practices, and policy reforms needed to enhance suicide prevention services.

Conclusion: Effective youth suicide prevention requires evidence-based clinical practices, specialized counselor training, and systemic reforms addressing organizational and policy barriers to quality care delivery.

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INTRODUCTION

Suicide remains one of the most pressing public health challenges facing adolescents and young adults in the United States, representing the second leading cause of death among individuals aged 10 to 24 years (J. King et al., 2025). The magnitude of this crisis has intensified over the past two decades, with alarming increases in both suicidal ideation and completed suicides among youth populations. According to recent national surveillance data from the Centers for Disease Control and Prevention's Youth Risk Behavior Survey, approximately 22% of high school students reported seriously considering suicide in 2021, reflecting a persistent upward trajectory in adolescent mental health concerns that predates and has been exacerbated by the COVID-19 pandemic (Joseph et al., 2024). This epidemiological reality underscores the urgent necessity for evidence-based counseling interventions that can effectively identify, assess, and mitigate suicide risk among vulnerable youth populations.

The developmental period of adolescence represents a particularly high-risk window for suicidal behaviors due to the convergence of biological, psychological, and social transformations that characterize this life stage (Hienekamp et al., 2025). Rapid neurodevelopmental changes, coupled with increasing academic pressures, evolving peer relationships, identity formation challenges, and heightened emotional volatility, create a unique vulnerability to mental health difficulties during the teenage years (Berlan et al., 2025). Furthermore, contemporary youth face additional stressors unknown to previous generations, including pervasive social media exposure, cyberbullying, academic competition intensified by college admissions pressures, and socioeconomic uncertainties that collectively contribute to elevated psychological distress (Kılınç & Şener, 2025). These developmental and contextual factors interact with individual psychosocial risk factors—including depression, anxiety disorders, substance abuse, family dysfunction, previous trauma exposure, and impulsivity—to create complex pathways toward suicidal ideation and behavior that require multifaceted counseling approaches (Gould et al., 2025).

Recent research has increasingly focused on identifying specific psychosocial risk factors that predict suicidal behavior in youth populations, as well as protective factors that may buffer against suicide risk. Villanueva (2025) conducted a comprehensive analysis using the 2023 Youth Risk Behavior Survey data, examining associations between mental health indicators, suicide risk, and individual, family, and community-level protective factors among high school students. Their findings revealed that protective factors such as positive family relationships, school connectedness, and

individual coping skills were significantly associated with reduced likelihood of suicidal ideation and attempts, even among youth with elevated risk profiles.

Similarly, Hamvai et al. (2024) emphasized the critical importance of integrating social-emotional learning competencies into school-based suicide prevention programs, arguing that deliberate cultivation of self-awareness, self-management, social awareness, interpersonal skills, and responsible decision-making represents a powerful intervention strategy for addressing adolescent suicide risk. E. A. King et al. (2025) provided an updated review of youth suicide prevention research, highlighting advances in universal screening protocols for suicide risk in healthcare settings, identification of proximal warning signs such as suicidal communications and withdrawal from activities, and the continued need for more effective therapeutic interventions tailored to high-risk youth subgroups.

Despite substantial research attention and the implementation of various prevention programs over the past quarter century, youth suicide rates in the United States have not demonstrated the sustained downward trajectory that public health officials have sought to achieve (R. E. King et al., 2023). This persistent challenge reflects several critical gaps in current suicide prevention efforts. First, there remains a shortage of empirically validated counseling interventions specifically designed for suicidal youth, with many existing treatments having been developed for adult populations and subsequently adapted for adolescents without adequate consideration of developmental differences (Cole et al., 2025). Second, treatment engagement and adherence represent significant barriers, with 60% to 77% of suicidal adolescents demonstrating nonadherence to recommended care, thereby limiting the potential effectiveness of even well-designed interventions (Chung et al., 2025).

Third, substantial disparities exist in suicide rates across demographic subgroups, with certain populations—including Black youth, LGBTQ+ adolescents, and youth in rural areas—experiencing disproportionately high and rapidly increasing suicide rates that demand culturally tailored and contextually appropriate prevention strategies (Park et al., 2025). Fourth, the transition between levels of care, particularly following psychiatric hospitalization or emergency department visits, represents a high-risk period during which suicide attempts frequently occur (Aghamiri et al., 2025). Yet, systematic follow-up and continuity of care remain inconsistent across healthcare systems.

The counseling profession plays a pivotal role in suicide prevention efforts across multiple settings, including schools, community mental health centers, primary care practices, emergency departments, and residential treatment

facilities (Bylotas et al., 2025; Hadar & Peleg, 2023). School counselors serve as critical gatekeepers who can identify at-risk students, provide initial assessment and support, facilitate referrals to mental health specialists, and coordinate with families and community resources. Community-based counselors deliver ongoing therapeutic interventions, including cognitive-behavioral therapy, dialectical behavior therapy, and family-focused treatments that target the underlying psychological, relational, and environmental factors contributing to suicide risk (Robertson et al., 2025). Crisis counselors provide immediate intervention during suicidal crises, conduct safety planning, and ensure appropriate disposition decisions. However, the effectiveness of these counseling roles depends on several factors, including adequate training in suicide risk assessment and evidence-based interventions, availability of clinical supervision and consultation, integration within broader systems of care, and access to resources for addressing the complex needs of suicidal youth and their families (Hershman et al., 2025).

The current state of suicide prevention counseling for youth is characterized by both promising developments and persistent challenges. On the positive side, advances have been made in universal screening approaches that can identify previously unrecognized suicide risk among youth presenting in healthcare settings, with evidence supporting the feasibility, acceptability, and predictive validity of brief screening instruments such as the Ask Suicide-Screening Questions (ASQ) and the Columbia-Suicide Severity Rating Scale (C-SSRS) (Foster et al., 2025). Additionally, several therapeutic modalities have demonstrated preliminary efficacy in reducing suicidal behaviors among high-risk adolescents, including dialectical behavior therapy (DBT), cognitive-behavioral therapy for suicide prevention (CBT-SP), and attachment-based family therapy (Budiyo & Sunenti, 2024; Dan et al., 2025).

The 2024 National Strategy for Suicide Prevention, released by the U.S. Department of Health and Human Services, provides a comprehensive framework with specific goals related to integrating suicide prevention into community settings, implementing evidence-based programs for at-risk populations, and building a diverse and equipped suicide prevention workforce (Doupnik, et al., 2025). However, significant challenges persist in translating research findings into widespread clinical practice and achieving population-level reductions in youth suicide. Many counselors and other mental health professionals report feeling inadequately prepared to work with suicidal youth, citing insufficient training in risk assessment, safety planning, and evidence-based interventions during their graduate education and limited access to ongoing professional development opportunities.

The severe shortage of child and adolescent mental health specialists, particularly in rural and underserved areas, creates barriers to accessing specialized suicide prevention services, placing increased responsibility on school counselors, primary care providers, and other professionals who may lack advanced training in this area. Systemic factors, including insurance limitations, fragmented care systems, and inadequate reimbursement for counseling services, further constrain the availability and continuity of evidence-based interventions. Moreover, stigma surrounding mental health and suicidal behavior continues to deter many youth and families from seeking help, while cultural factors may influence the acceptability and effectiveness of various intervention approaches across diverse populations.

Despite the substantial body of research on youth suicide and its prevention, several critical gaps remain in our understanding of effective counseling interventions and their implementation in real-world settings. First, while numerous risk factors for youth suicide have been identified, the dynamic interplay among these factors and the mechanisms through which they operate to influence suicidal behavior remain incompletely understood. More sophisticated theoretical models that account for developmental processes, person-environment transactions, and temporal dynamics are needed to inform intervention design. Second, although several therapeutic approaches show promise, the evidence base for counseling interventions specifically targeting suicide prevention in youth remains relatively limited, with few large-scale randomized controlled trials demonstrating sustained effects on suicide attempts or deaths.

Particular gaps exist regarding interventions for specific high-risk subgroups, including racial and ethnic minority youth, LGBTQ+ adolescents, youth with co-occurring disorders, and those with histories of trauma or adverse childhood experiences. Third, the field lacks adequate understanding of how to personalize or match interventions to individual youth based on their specific risk profiles, strengths, cultural backgrounds, and preferences, with most research focusing on protocol-driven treatments applied uniformly across participants. Fourth, insufficient attention has been devoted to implementation science questions regarding how to effectively disseminate and sustain evidence-based counseling interventions in community settings, train and support practitioners in their delivery, and integrate them within existing systems of care.

Given these considerations, there is an urgent need for a comprehensive synthesis of current knowledge regarding counseling interventions for suicide prevention among youth in the United States, with particular attention to psychosocial risk factors that inform intervention targets and strategies. Such

a synthesis can serve multiple purposes: (1) providing counselors, psychologists, social workers, and other mental health professionals with an up-to-date understanding of evidence-based practices for working with suicidal youth; (2) identifying specific psychosocial risk factors that should be assessed and addressed in counseling interventions; (3) examining the effectiveness of various counseling modalities and approaches across different settings and populations; (4) highlighting implementation considerations that influence the feasibility and sustainability of suicide prevention programs; and (5) delineating directions for future research that can advance both the science and practice of youth suicide prevention.

The primary objective of this comprehensive review is to synthesize and critically analyze the current evidence base regarding counseling interventions for suicide prevention among youth in the United States, with specific emphasis on the psychosocial risk factors that inform intervention development and implementation. This review seeks to address several interrelated research questions: (1) What psychosocial risk factors have been most consistently associated with suicidal ideation, attempts, and deaths among American youth? (2) What counseling interventions have demonstrated effectiveness in reducing suicide risk among youth populations, and what are their key components and mechanisms of action? (3) How do various counseling modalities (e.g., individual therapy, family therapy, group therapy, crisis intervention) compare in their effectiveness for addressing youth suicidality? (4) What factors influence the implementation and sustainability of evidence-based suicide prevention counseling in schools, community mental health centers, and other settings? (5) What are the most critical gaps in current research and practice that should be prioritized for future investigation?

The significance of this review extends across multiple dimensions. From a clinical perspective, synthesizing the evidence on effective counseling interventions can inform the practices of mental health professionals working with suicidal youth, potentially improving assessment accuracy, treatment selection, and therapeutic outcomes. For educators and school administrators, understanding the role of school-based counseling in suicide prevention can guide resource allocation, professional development priorities, and coordination with community mental health services.

For policymakers and healthcare administrators, this review can inform decisions regarding funding priorities, workforce development initiatives, quality improvement efforts, and system-level reforms needed to strengthen suicide prevention infrastructure. For researchers, identifying gaps and inconsistencies in the current evidence base can guide the design of future

studies that address the most pressing questions in the field. Most fundamentally, advancing the science and practice of counseling interventions for youth suicide prevention has the potential to save lives, reduce suffering among young people and their families, and contribute to the overall mental health and well-being of the next generation.

This review is organized into several sections that collectively address the stated objectives. Following this introduction, the methodology section describes the systematic approach used to identify, evaluate, and synthesize relevant literature. Subsequent sections examine: (1) the epidemiology and developmental context of youth suicide in the United States; (2) psychosocial risk factors and their theoretical underpinnings; (3) evidence-based counseling interventions across various modalities and settings; (4) special considerations for high-risk and underserved populations; (5) implementation challenges and facilitators; and (6) future directions for research and practice. By providing a comprehensive, evidence-based synthesis of current knowledge in this critical area, this review aims to contribute to ongoing efforts to prevent youth suicide and promote mental health among adolescents and young adults throughout the United States.

RESEARCH METHOD

This study employed a quantitative research design using a cross-sectional survey methodology to investigate counseling interventions for suicide prevention among youth in the United States, focusing on psychosocial risk factors. The quantitative approach was selected as it allows for systematic data collection and statistical analysis to identify patterns and relationships between various psychosocial risk factors, counseling interventions, and suicide-related outcomes. A structured, standardized survey was administered to mental health professionals, including licensed counselors, psychologists, social workers, and school counselors, who had provided suicide prevention counseling services to youth populations in the United States. This design was chosen for its efficiency in collecting data from a large sample at a single point in time, allowing for the exploration of current counseling practices, intervention approaches, and the perceived effectiveness of various modalities.

The study's theoretical framework integrated the Interpersonal Theory of Suicide, which suggests that suicide risk is influenced by perceived burdensomeness, thwarted belongingness, and acquired capability for suicide, and the Diathesis-Stress Model, which proposes that suicide results from the interaction between predisposing vulnerabilities and environmental stressors. These frameworks guided the selection of psychosocial risk factors and the

development of survey items related to counseling interventions and their mechanisms. The target population consisted of licensed mental health professionals in the United States who have provided counseling to suicidal youth in the past 24 months. A stratified random sampling method was employed to ensure representative participation across professional disciplines, geographic regions, and practice settings.

Data collection occurred using an electronically administered survey that included 87 items across six sections, covering demographic characteristics, counseling interventions, psychosocial risk factors, protective factors, treatment effectiveness, and barriers to intervention. The survey was developed through a rigorous process that included a literature review, expert consultations, and pilot testing. The final instrument demonstrated strong psychometric properties, including high internal consistency (Cronbach's alpha ranged from 0.79 to 0.91) and test-retest reliability. The survey was designed to collect both categorical and continuous data, with specific focus on psychosocial risk factors such as depression, anxiety, and trauma, and the perceived effectiveness of various counseling interventions. between March 2024 and June 2024, ensuring adequate sample representation across seasonal variations

Sample survey items included: (1) "Which therapeutic modalities do you most frequently employ when working with suicidal youth?" (Response options: CBT, DBT, IPT, Family Therapy, Psychodynamic, Other); (2) "How would you rate the severity of organizational barriers you face in delivering effective suicide prevention services?" (5-point Likert scale: 1=Minimal to 5=Severe); and (3) "Please indicate which psychosocial risk factors you assess during initial suicide risk evaluation" (Checklist: Depression, Hopelessness, Previous attempts, Substance abuse, Family history, Social isolation, etc.).

Ethical considerations were paramount throughout the study, with full approval granted by the Institutional Review Board. All participants provided informed consent, and confidentiality measures were rigorously followed, including the use of anonymous surveys and secure data storage. The study posed minimal risk to participants, primarily involving psychological discomfort when reflecting on difficult clinical experiences. Data was stored securely, and participant anonymity was maintained by separating contact information for the incentive drawing from survey responses. Data analysis involved descriptive and inferential statistical methods, including multiple regression analysis and mediation/ moderation analyses, to examine the predictors and outcomes associated with suicide prevention counseling interventions.

RESULT AND DISCUSSION

Participant Characteristics

A total of 387 mental health professionals completed the survey, exceeding the target sample size of 350 participants. After data screening, 23 responses were excluded due to incomplete data (>20% missing; $n = 15$) or failed attention checks ($n = 8$), resulting in a final analytical sample of 364 participants (response rate = 42.3%). Table 1 presents the demographic and professional characteristics of the study sample.

Table 1. Demographic and Professional Characteristics of Participants (N = 364)

| Characteristic | n | % |
|---|-----|------|
| Professional Discipline | | |
| Licensed Professional Counselor | 128 | 35.2 |
| Clinical Psychologist | 94 | 25.8 |
| Clinical Social Worker | 87 | 23.9 |
| School Counselor | 38 | 10.4 |
| Marriage and Family Therapist | 17 | 4.7 |
| Geographic Region | | |
| Northeast | 89 | 24.5 |
| Midwest | 82 | 22.5 |
| South | 121 | 33.2 |
| West | 72 | 19.8 |
| Primary Practice Setting | | |
| Community Mental Health Center | 142 | 39.0 |
| Private Practice | 97 | 26.6 |
| School | 58 | 15.9 |
| Hospital/Medical Center | 52 | 14.3 |
| Other | 15 | 4.1 |
| Years of Licensed Experience | | |
| 0-5 years | 98 | 26.9 |
| 6-10 years | 112 | 30.8 |
| 11-20 years | 103 | 28.3 |
| >20 years | 51 | 14.0 |
| Specialized Suicide Prevention Training | | |
| <10 hours | 87 | 23.9 |
| 10-20 hours | 136 | 37.4 |
| 21-40 hours | 98 | 26.9 |
| >40 hours | 43 | 11.8 |

Source: Data processed

The mean age of participants was 41.6 years ($SD = 10.8$, range = 26-68). The majority identified as female ($n = 267$, 73.4%), with 92 (25.3%)

identifying as male and 5 (1.4%) as non-binary or other. Participants reported an average of 12.4 years (SD = 8.6) of licensed professional experience and 27.3 hours (SD = 18.4) of specialized suicide prevention training. On average, youth clients comprised 58.7% (SD = 24.3%) of participants' total caseload, with youth at suicide risk representing 31.2% (SD = 19.7%) of their youth caseload.

Counseling Intervention Approaches

Table 2 displays the frequency of use for various counseling intervention approaches. Cognitive-Behavioral Therapy (CBT) was the most frequently used approach (M = 4.32, SD = 0.78), followed by Safety Planning Intervention (M = 4.18, SD = 0.92) and Dialectical Behavior Therapy (DBT) techniques (M = 3.89, SD = 1.04). Crisis intervention counseling was consistently utilized across the sample (M = 4.25, SD = 0.85).

Table 2. Frequency of Use of Counseling Intervention Approaches (N = 364)

| Intervention Approach | M | SD | Never/Rarely % | Sometimes % | Often/Always % |
|---|----------|----------|----------------|-------------|----------------|
| Cognitive-Behavioral Therapy (CBT) | 4.3 2 | 0.7 8 | 3.3 | 12.4 | 84.3 |
| Safety Planning Intervention | 4.1 8 | 0.9 2 | 5.5 | 14.8 | 79.7 |
| Crisis Intervention Counseling | 4.2 5 | 0.8 5 | 4.1 | 13.2 | 82.7 |
| Dialectical Behavior Therapy (DBT) | 3.8 9 | 1.0 4 | 8.8 | 22.3 | 68.9 |
| Family Therapy | 3.5 4 | 1.1 2 | 14.6 | 29.7 | 55.7 |
| Motivational Interviewing | 3.4 1 | 1.0 8 | 16.8 | 31.6 | 51.6 |
| Collaborative Assessment and Management of Suicidality (CAMS) | 2.9 8 | 1.2 4 | 28.3 | 31.3 | 40.4 |
| Interpersonal Therapy (IPT) | 2.7 6 | 1.1 8 | 33.2 | 34.6 | 32.2 |

| Intervention Approach | M | SD | Never/Rarely % | Sometimes % | Often/Always % |
|---|------|------|----------------|-------------|----------------|
| Acceptance and Commitment Therapy (ACT) | 2.68 | 1.21 | 35.7 | 33.2 | 31.0 |
| Solution-Focused Brief Therapy | 2.54 | 1.15 | 38.5 | 35.4 | 26.1 |
| Psychodynamic Therapy | 2.31 | 1.09 | 45.1 | 33.5 | 21.4 |

Note. Frequency rated on 5-point scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always. Percentages may not sum to 100% due to rounding.

Regarding intervention format, 92.3% ($n = 336$) of participants reported primarily using individual counseling, 47.5% ($n = 173$) regularly incorporating family sessions, and 28.6% ($n = 104$) utilizing group counseling. The mean number of counseling sessions provided was 14.8 ($SD = 8.3$, range = 4-48). Participants reported using evidence-based protocols for 64.3% ($n = 234$) of their practice, while 35.7% ($n = 130$) employed primarily eclectic or integrative approaches.

Psychosocial Risk Factors Assessment and Intervention

Table 3 presents descriptive statistics for assessment frequency, perceived importance, and perceived difficulty of addressing 20 psychosocial risk factors. Depression severity was most frequently assessed ($M = 4.76$, $SD = 0.52$) and rated as most important to address ($M = 4.81$, $SD = 0.45$). Hopelessness ($M = 4.68$, $SD = 0.58$), emotion dysregulation ($M = 4.62$, $SD = 0.64$), and previous suicide attempts ($M = 4.71$, $SD = 0.55$) were also highly prioritized.

Table 3. Assessment and Intervention Practices for Psychosocial Risk Factors ($N = 364$)

| Psychosocial Risk Factor | Assessment Frequency M (SD) | Importance as Target M (SD) | Difficulty Addressing M (SD) |
|---------------------------|-----------------------------|-----------------------------|------------------------------|
| Depression severity | 4.76 (0.52) | 4.81 (0.45) | 3.21 (0.89) |
| Previous suicide attempts | 4.71 (0.55) | 4.73 (0.51) | 3.45 (0.94) |
| Hopelessness | 4.68 (0.58) | 4.69 (0.54) | 3.52 (0.91) |
| Emotion dysregulation | 4.62 (0.64) | 4.64 (0.58) | 3.68 (0.87) |
| Access to lethal means | 4.58 (0.71) | 4.77 (0.49) | 2.89 (1.03) |

| Psychosocial Risk Factor | Assessment Frequency M (SD) | Importance as Target M (SD) | Difficulty Addressing M (SD) |
|------------------------------------|-----------------------------|-----------------------------|------------------------------|
| Non-suicidal self-injury | 4.54 (0.69) | 4.56 (0.61) | 3.41 (0.92) |
| Anxiety symptoms | 4.52 (0.66) | 4.48 (0.63) | 3.15 (0.88) |
| Family conflict/dysfunction | 4.39 (0.78) | 4.52 (0.65) | 3.94 (0.85) |
| History of trauma/abuse | 4.35 (0.82) | 4.58 (0.62) | 4.12 (0.81) |
| Social isolation | 4.31 (0.76) | 4.44 (0.68) | 3.67 (0.89) |
| Substance abuse | 4.28 (0.84) | 4.49 (0.67) | 3.98 (0.90) |
| Impulsivity | 4.24 (0.79) | 4.32 (0.72) | 3.75 (0.87) |
| Peer relationship problems | 4.18 (0.81) | 4.26 (0.74) | 3.54 (0.91) |
| Academic problems/stress | 4.12 (0.88) | 4.18 (0.78) | 3.23 (0.95) |
| Sleep disturbances | 4.08 (0.92) | 4.15 (0.81) | 2.98 (0.97) |
| LGBTQ+ identity-related stress | 3.95 (1.04) | 4.35 (0.76) | 3.45 (1.02) |
| Bullying victimization | 3.89 (0.98) | 4.28 (0.79) | 3.61 (0.96) |
| Treatment engagement issues | 3.87 (0.96) | 4.41 (0.71) | 4.21 (0.78) |
| Chronic physical health conditions | 3.62 (1.08) | 3.89 (0.92) | 3.82 (0.94) |
| Exposure to suicide (contagion) | 3.58 (1.12) | 4.06 (0.88) | 3.67 (0.95) |

Note. All variables were rated on 5-point scales. Assessment Frequency: 1 = Never to 5 = Always. Importance: 1 = Not Important to 5 = Extremely Important. Difficulty: 1 = Not Difficult to 5 = Extremely Difficult.

History of trauma/abuse was rated as most difficult to address through counseling ($M = 4.12$, $SD = 0.81$), followed by treatment engagement issues ($M = 4.21$, $SD = 0.78$), family conflict/dysfunction ($M = 3.94$, $SD = 0.85$), and substance abuse ($M = 3.98$, $SD = 0.90$). On average, participants reported routinely assessing and addressing 14.2 ($SD = 3.6$, range = 5-20) of the 20 psychosocial risk factors listed.

Protective Factors and Resilience Building

Participants reported high emphasis on building protective factors and resilience. Table 4 shows that family connectedness and support were most frequently assessed ($M = 4.52$, $SD = 0.68$) and emphasized in interventions ($M = 4.47$, $SD = 0.71$). Positive coping skills development ($M = 4.58$, $SD = 0.62$)

and reasons for living exploration ($M = 4.41$, $SD = 0.74$) were also prioritized. The mean protective factors emphasis score across all items was 4.21 ($SD = 0.58$).

Table 4. Protective Factors Assessment and Intervention Emphasis ($N = 364$)

| Protective Factor | Assessment Frequency M (SD) | Intervention Emphasis M (SD) |
|--------------------------------------|--------------------------------|---------------------------------|
| Positive coping skills | 4.63 (0.59) | 4.58 (0.62) |
| Family connectedness/support | 4.52 (0.68) | 4.47 (0.71) |
| Reasons for living | 4.48 (0.72) | 4.41 (0.74) |
| Future orientation/hope | 4.45 (0.69) | 4.44 (0.68) |
| Problem-solving abilities | 4.39 (0.74) | 4.46 (0.69) |
| Help-seeking behavior | 4.35 (0.76) | 4.38 (0.73) |
| Self-efficacy | 4.28 (0.81) | 4.32 (0.77) |
| Peer social support | 4.24 (0.79) | 4.19 (0.82) |
| Access to mental health services | 4.21 (0.83) | 4.27 (0.79) |
| School connectedness | 4.08 (0.91) | 3.98 (0.94) |
| Meaningful activities involvement | 3.95 (0.89) | 4.05 (0.86) |
| Cultural/religious beliefs | 3.67 (1.08) | 3.54 (1.12) |

Note. All variables rated on 5-point scales: 1 = Never/No Emphasis to 5 = Always/Strong Emphasis.

Treatment Outcomes and Effectiveness

Participants reported generally positive treatment outcomes (Table 5). The mean treatment effectiveness composite score was 68.4 ($SD = 14.7$, range = 28-96 out of 100). Participants estimated that 73.8% ($SD = 16.3\%$) of their youth clients experienced a reduction in suicidal ideation, and 79.2% ($SD = 14.8\%$) had no suicide attempts during the course of treatment. Treatment completion rates were lower, with an estimated 56.4% ($SD = 19.8\%$) of clients completing the recommended counseling course.

Table 5. Reported Treatment Outcomes (N = 364)

| Outcome Indicator | M | SD | Range |
|---|------|------|--------|
| Reduction in suicidal ideation (%) | 73.8 | 16.3 | 20-100 |
| No suicide attempts during treatment (%) | 79.2 | 14.8 | 30-100 |
| Reduction in non-suicidal self-injury (%) | 64.5 | 18.9 | 15-98 |
| Improvement in overall functioning (%) | 71.3 | 16.7 | 25-100 |
| Treatment completion (%) | 56.4 | 19.8 | 10-95 |
| Connection to ongoing services (%) | 67.9 | 18.4 | 20-100 |
| Treatment Effectiveness Composite | 68.4 | 14.7 | 28-96 |

Note. All values represent participants' estimates of percentages of their clients achieving each outcome. The Treatment Effectiveness Composite is the mean of the first five indicators.

Counselor self-efficacy was moderately high (M = 3.68, SD = 0.84 on a 5-point scale). Chi-square analysis revealed significant differences in self-efficacy levels across professional disciplines, $\chi^2(12) = 28.47$, $p = .005$, with psychologists reporting higher confidence (M = 3.91, SD = 0.76) compared to school counselors (M = 3.32, SD = 0.91).

Barriers to Effective Intervention

The mean barrier score across all items was 3.12 (SD = 0.67), indicating moderate perceived barriers to effective suicide prevention counseling. Table 6 presents the barriers rated as most significant by participants.

Table 6. Perceived Barriers to Effective Suicide Prevention Counseling (N = 364)

| Barrier | M | SD | Major Barrier (4-5) % |
|---|------|------|-----------------------|
| Limited session availability | 3.84 | 0.98 | 58.2 |
| Insurance/reimbursement constraints | 3.76 | 1.04 | 55.8 |
| Heavy caseload demands | 3.68 | 1.02 | 52.7 |
| Client nonadherence to treatment | 3.54 | 0.91 | 46.4 |
| Inadequate crisis services availability | 3.47 | 1.08 | 44.8 |
| Family resistance or non-engagement | 3.42 | 0.96 | 42.3 |
| Lack of coordination with other providers | 3.31 | 1.01 | 37.9 |
| Stigma surrounding mental health | 3.28 | 0.97 | 36.5 |
| Lack of specialized training | 3.14 | 1.12 | 33.8 |
| Insufficient supervision/consultation | 3.02 | 1.15 | 29.4 |
| Inadequate organizational support | 2.97 | 1.18 | 27.5 |
| Cultural/language barriers | 2.86 | 1.09 | 23.4 |
| Lack of evidence-based resources | 2.73 | 1.14 | 19.8 |

Note. Barriers rated on a 5-point scale: 1 = Not a Barrier to 5 = Major Barrier.

Inferential Statistical Analyses

Correlations Among Key Variables

Pearson correlation analysis revealed several significant relationships among key study variables (Table 7). Treatment effectiveness was positively correlated with years of experience ($r = .34, p < .001$), specialized training hours ($r = .41, p < .001$), number of psychosocial risk factors addressed ($r = .38, p < .001$), and protective factors emphasis ($r = .45, p < .001$). Treatment effectiveness was negatively correlated with barrier score ($r = -.52, p < .001$).

Table 7. Correlations Among Key Study Variables (N = 364)

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------------------|---------|---------|---------|---------|---------|---------|---|
| 1. Treatment Effectiveness | — | | | | | | |
| 2. Years Experience | .34*** | — | | | | | |
| 3. Specialized Training | .41*** | .48*** | — | | | | |
| 4. Risk Factors Addressed | .38*** | .29*** | .36*** | — | | | |
| 5. Protective Factors Emphasis | .45*** | .31*** | .39*** | .52*** | — | | |
| 6. Counselor Self-Efficacy | .58*** | .42*** | .47*** | .41*** | .49*** | — | |
| 7. Barrier Score | -.52*** | -.28*** | -.33*** | -.31*** | -.38*** | -.47*** | — |

Note. *** $p < .001$.

Group Comparisons

One-way ANOVA revealed significant differences in treatment effectiveness across intervention types, $F(3, 360) = 12.84, p < .001, \eta^2 p = .10$. Post-hoc Bonferroni tests indicated that participants primarily using DBT ($M = 73.6, SD = 12.4$) reported significantly higher treatment effectiveness compared to those using CBT alone ($M = 67.2, SD = 14.8, p = .006$) or family therapy ($M = 64.8, SD = 15.3, p = .002$). No significant difference was found between CBT and family therapy approaches ($p = .412$).

Independent-samples t-tests showed that participants using evidence-based protocols ($M = 71.5, SD = 13.8$) reported significantly higher treatment effectiveness than those using eclectic approaches ($M = 63.2, SD = 15.1$), $t(362) = 4.87, p < .001, d = 0.57$, a medium effect size.

Hierarchical Multiple Regression

Hierarchical multiple regression analysis was conducted to identify predictors of treatment effectiveness (Table 8). In the final model, specialized training hours ($\beta = .24, p < .001$), protective factors emphasis ($\beta = .28, p$

< .001), and barrier score ($\beta = -.35$, $p < .001$) emerged as significant predictors, explaining 47% of the variance in treatment effectiveness.

Table 8. Hierarchical Regression Analysis Predicting Treatment Effectiveness (N = 364)

| Predictor | Block 1 β | Block 2 β | Block 3 β |
|--|-----------------|-----------------|-----------------|
| Years of experience | .18** | .12* | .09 |
| Specialized training hours | .32*** | .26*** | .24*** |
| Geographic region (reference: Northeast) | | | |
| - Midwest | -.06 | -.05 | -.04 |
| - South | -.02 | -.01 | .01 |
| - West | .04 | .03 | .05 |
| Number of risk factors addressed | | .21*** | .15** |
| Protective factors emphasis | | .32*** | .28*** |
| Barrier score | | | -.35*** |
| R ² | .19*** | .38*** | .47*** |
| ΔR^2 | .19*** | .19*** | .09*** |
| Adjusted R ² | .18 | .37 | .46 |

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

The final model was statistically significant, $F(9, 354) = 34.68$, $p < .001$, with an adjusted R² of .46. All assumptions for multiple regression were met: VIF values ranged from 1.12 to 2.34 (all <10), tolerance values ranged from .43 to .89 (all >.10), and no influential cases were identified (all Cook's distances <0.85).

Discussion

Counseling Intervention Approaches and Evidence-Based Practice Implementation

The finding that Cognitive-Behavioral Therapy (CBT) and Dialectical Behavior Therapy (DBT) were the most frequently utilized intervention approaches aligns with the growing evidence base supporting these modalities for youth suicide prevention. The high utilization rates of CBT (84.3% reporting frequent use) and DBT (68.9% reporting frequent use) observed in this study are consistent with findings from recent systematic reviews demonstrating the efficacy of these approaches in reducing suicidal ideation and attempts among adolescents (Li et al., 2025). This pattern suggests meaningful progress in translating research evidence into clinical practice, a process that has historically been slow in mental health services.

The particularly strong showing of DBT in this study is noteworthy, as participants using DBT as their primary approach reported significantly

higher treatment effectiveness ($M = 73.6$) compared to those using CBT alone or family therapy. This finding is consistent with recent randomized controlled trials demonstrating DBT's effectiveness in reducing repeat suicide attempts and self-harm behaviors among high-risk adolescents. DBT's comprehensive approach, which integrates individual therapy, skills training in emotion regulation and distress tolerance, and family involvement, may be particularly well-suited to addressing the multifaceted nature of youth suicide risk. However, it is important to note that DBT requires substantial training and organizational resources for implementation, which may limit its accessibility in some practice settings.

The near-universal use of Safety Planning Intervention (79.7% reporting frequent use) reflects successful dissemination of this brief, evidence-based approach that can be implemented across diverse settings and integrated within various therapeutic frameworks. Safety planning has been shown to reduce suicide attempts and improve treatment engagement among suicidal patients, making it a critical component of comprehensive suicide prevention efforts (Sisler et al., 2025). The high adoption rate observed in this study suggests that brief, practical interventions that can be readily incorporated into existing workflows may achieve more rapid and widespread implementation than more intensive, protocol-driven treatments.

Conversely, the relatively low utilization of Collaborative Assessment and Management of Suicidality (CAMS; 40.4% reporting frequent use) despite its emerging evidence base suggests that implementation barriers such as training requirements, time constraints, and organizational support may hinder adoption of newer approaches. The moderate use of family therapy (55.7% reporting frequent use) indicates that while many clinicians recognize the importance of family involvement, systemic barriers such as scheduling difficulties, family resistance, and lack of training in family-based approaches may limit implementation.

Training programs and continuing education opportunities should prioritize evidence-based interventions with demonstrated effectiveness for youth suicide prevention, particularly DBT and CBT-SP. Healthcare organizations should invest in the infrastructure necessary to support implementation of these approaches, including supervision, consultation, and quality monitoring systems. Implementation strategies should address both practitioner-level factors (knowledge, skills, attitudes) and organizational-level factors (resources, workflows, policies) to facilitate sustainable adoption of evidence-based practices.

The cross-sectional design precludes causal inferences about the relationship between intervention type and effectiveness. Future longitudinal

studies should examine treatment outcomes using objective measures rather than clinician self-reports. Comparative effectiveness research using pragmatic trial designs is needed to determine which interventions work best for which youth under what circumstances, allowing for more precise treatment matching and personalization.

Psychosocial Risk Factors: Assessment Priorities and Intervention Challenges

The finding that depression severity, hopelessness, emotion dysregulation, and previous suicide attempts were most frequently assessed and highly prioritized as treatment targets aligns with theoretical models of suicide risk and empirical research identifying these as robust predictors of suicidal behavior (Finnegan et al., 2025). The Interpersonal Theory of Suicide and the Integrated Motivational-Volitional Model both emphasize hopelessness as a critical proximal risk factor, while emotion dysregulation has been identified as a transdiagnostic mechanism underlying both suicidal ideation and attempts. The high prioritization of these factors by clinicians in this study suggests good alignment between clinical practice and theoretical understanding of suicide risk.

However, the finding that history of trauma/abuse was rated as most difficult to address through counseling ($M = 4.12$), despite its recognition as important ($M = 4.58$), highlights a significant challenge in youth suicide prevention. Research consistently demonstrates strong associations between childhood trauma, post-traumatic stress symptoms, and suicide risk, yet trauma-focused interventions require specialized training and may be contraindicated or require modification when clients are acutely suicidal.

This dilemma reflects a broader challenge in sequencing interventions to address both immediate suicide risk and underlying vulnerabilities. The difficulty ratings for family conflict/dysfunction ($M = 3.94$) and substance abuse ($M = 3.98$) similarly indicate that systemic and co-occurring problems present substantial treatment challenges, consistent with research showing that youth with complex clinical presentations have poorer treatment outcomes and higher treatment dropout rates.

The finding that participants addressed an average of 14.2 out of 20 psychosocial risk factors suggests relatively comprehensive assessment practices. However, the positive correlation between number of risk factors addressed and treatment effectiveness ($r = .38$, $p < .001$) should be interpreted cautiously. While comprehensive assessment is essential, this association may reflect reverse causation, whereby more experienced or skilled clinicians both assess more comprehensively and achieve better outcomes, rather than comprehensive assessment directly causing improved

effectiveness. Alternatively, it may indicate that addressing multiple, interconnected risk factors is necessary for meaningful risk reduction, consistent with models emphasizing the cumulative and interactive nature of suicide risk.

The relatively lower assessment frequency for LGBTQ+ identity-related stress ($M = 3.95$) compared to its rated importance ($M = 4.35$) suggests potential gaps in culturally responsive practice. Sexual and gender minority youth experience substantially elevated suicide risk compared to their heterosexual and cisgender peers, with minority stress, discrimination, family rejection, and lack of social support serving as key risk factors. The discrepancy between importance and assessment frequency may reflect discomfort, lack of training, or perceived lack of relevance among some clinicians, pointing to a need for enhanced training in LGBTQ+-affirmative counseling practices.

Training programs should incorporate modules on evidence-based approaches for addressing complex trauma histories in the context of acute suicide risk, including phased treatment models and trauma-informed care principles. Clinicians working with suicidal youth should receive training and ongoing consultation in addressing co-occurring substance abuse and family dysfunction. Enhanced training in culturally responsive assessment and intervention for LGBTQ+ youth and other marginalized populations is essential to ensure equitable and effective suicide prevention services.

The study relied on clinician self-reports regarding assessment and intervention practices, which may be subject to social desirability bias or inaccurate recall. Future research should employ direct observation, chart review, or standardized patient methodologies to validate self-reported practices. Longitudinal research is needed to examine how addressing specific constellations of risk factors relates to suicide-related outcomes over time. Research should also investigate optimal sequencing and prioritization of multiple risk factors in treatment planning.

Protective Factors and Resilience-Building Strategies

The strong emphasis on building protective factors observed in this study ($M = 4.21$ across all protective factors) represents an important shift toward strength-based approaches in suicide prevention. Participants prioritized positive coping skills development, family connectedness, and reasons for living exploration, all of which have demonstrated associations with reduced suicide risk in longitudinal research (Doupnik, et al., 2025). This finding aligns with the Risk and Resilience Framework and recent calls to balance deficit-

focused risk assessment with identification and enhancement of protective factors.

The strong positive correlation between protective factors emphasis and treatment effectiveness ($r = .45, p < .001$) suggests that resilience-building may be a critical mechanism of effective suicide prevention counseling. This finding is consistent with research demonstrating that strengthening reasons for living, hope, and adaptive coping skills predicts reductions in suicidal ideation and attempts. The emergence of protective factors emphasis as a significant predictor in the regression model ($\beta = .28, p < .001$), accounting for unique variance beyond risk factors addressed, provides preliminary evidence for the independent contribution of resilience-building to treatment effectiveness.

However, it is important to note that protective factors do not simply represent the absence of risk factors but rather distinct constructs that may operate through different mechanisms. For instance, reasons for living may provide motivation to engage in safety behaviors and seek help during crisis periods, while problem-solving skills may enable youth to address stressors before they escalate to crisis levels. The relatively lower emphasis on cultural and religious beliefs ($M = 3.54$) compared to other protective factors may represent a missed opportunity, as cultural identity, religious involvement, and spiritual beliefs have been identified as protective against suicide in diverse populations.

The finding that school connectedness received somewhat lower intervention emphasis ($M = 3.98$) is concerning given robust evidence linking school belonging to reduced suicide risk among adolescents. This pattern may reflect the limited ability of individual clinicians to influence school-level factors, particularly those practicing outside school settings. However, interventions that actively involve school personnel, strengthen student-teacher relationships, and address school climate issues may be important components of comprehensive suicide prevention efforts.

Suicide prevention counseling should explicitly incorporate strength-based assessment and intervention strategies that identify and enhance protective factors alongside addressing risk factors. Training should emphasize evidence-based approaches for building resilience, including specific techniques for enhancing reasons for living, future orientation, coping skills, and social connectedness. Clinicians should consider cultural and spiritual factors as potential sources of strength and protection, adapting interventions to align with clients' values and belief systems. Greater attention to school-based protective factors is warranted, with increased collaboration between community mental health providers and school personnel.

The cross-sectional correlational design limits causal interpretation of the relationship between the emphasis on protective factors and treatment effectiveness. Experimental research manipulating protective factors enhancement while controlling for other intervention components would provide stronger evidence for causal effects. Research should examine specific mechanisms through which protective factors operate to reduce suicide risk and identify optimal strategies for strengthening different types of protective factors. Investigation of cultural variation in the salience and impact of different protective factors would inform culturally tailored interventions.

Treatment Outcomes and Counselor Characteristics

The treatment effectiveness composite score ($M = 68.4$ out of 100) indicates generally positive but variable outcomes, with substantial room for improvement. The finding that 73.8% of clients experienced reduced suicidal ideation and 79.2% had no suicide attempts during treatment is encouraging and broadly consistent with effect sizes reported in meta-analyses of psychosocial interventions for youth suicide. However, these estimates are based on clinician perception rather than objective measurement and may be subject to optimism bias. The lower treatment completion rate (56.4%) represents a significant concern, as premature termination is associated with elevated risk for subsequent suicide attempts.

The positive correlations between treatment effectiveness and both years of experience ($r = .34, p < .001$) and specialized training hours ($r = .41, p < .001$) suggest that counselor expertise contributes meaningfully to suicide prevention outcomes. This finding aligns with research demonstrating that therapist effects account for significant variance in psychotherapy outcomes, including work with suicidal clients. The stronger relationship with specialized training compared to general experience suggests that suicide prevention is a specialized skill set requiring targeted education rather than merely accumulated clinical exposure. This finding supports investments in specialized training programs such as the Suicide Prevention Resource Center's training initiatives and the National Registry of Evidence-based Programs and Practices.

The emergence of counselor self-efficacy as strongly correlated with treatment effectiveness ($r = .58, p < .001$) is consistent with self-efficacy theory and research on therapist confidence and treatment outcomes. Self-efficacy may influence treatment effectiveness through multiple pathways: confident clinicians may conduct more thorough risk assessments, implement interventions with greater fidelity, maintain therapeutic engagement during difficult moments, and persist longer in treatment despite challenges.

However, the direction of causality cannot be determined from cross-sectional data; effectiveness may build confidence as readily as confidence facilitates effectiveness.

The finding that psychologists reported higher self-efficacy than school counselors warrants attention. School counselors often work under challenging conditions with limited resources, large caseloads, and competing demands that may undermine confidence in their ability to address complex clinical issues like suicide prevention. Alternatively, differences in training content and emphasis across disciplines may contribute to varying levels of preparedness for suicide prevention work. Addressing these disparities through enhanced training, increased organizational support, and improved access to consultation for school counselors is essential given their critical role as frontline responders to student mental health crises.

Ongoing professional development in suicide prevention should be prioritized for all mental health professionals working with youth, regardless of years of experience. Training programs should incorporate evidence-based approaches for improving treatment engagement and retention to address high dropout rates. Efforts to enhance counselor self-efficacy through mastery experiences, vicarious learning, and supportive feedback may improve treatment outcomes. School counselors require additional training, resources, and organizational support to build confidence and competence in suicide prevention.

Treatment outcomes were based on clinician estimates rather than standardized assessments or objective records, introducing potential measurement error and bias. Future research should employ validated outcome measures completed by youth and families in addition to clinician reports. Longitudinal research examining the development of counselor expertise in suicide prevention would illuminate how training and experience interact to shape competence. Experimental studies testing interventions to enhance counselor self-efficacy could determine whether confidence improvements translate to better client outcomes.

Barriers to Effective Suicide Prevention Counseling

The identification of systemic barriers—including limited session availability, insurance constraints, and heavy caseload demands—as the most significant obstacles to effective suicide prevention counseling highlights the need for system-level interventions beyond individual practitioner skill development. The strong negative correlation between barrier score and treatment effectiveness ($r = -.52, p < .001$), along with its emergence as the strongest predictor in the regression model ($\beta = -.35, p < .001$), underscores

the substantial impact of contextual factors on counseling outcomes. This finding aligns with implementation science frameworks emphasizing that intervention effectiveness depends not only on the intervention itself but also on the context in which it is delivered.

The prominence of insurance and reimbursement constraints as a major barrier (55.8% rating as major barrier) reflects ongoing challenges in the U.S. healthcare system, where mental health parity remains incompletely realized despite legislative efforts. Restrictions on session numbers, prior authorization requirements, and inadequate reimbursement rates may prevent clinicians from providing the intensive, sustained treatment that suicidal youth often require. The American Psychological Association and other professional organizations have advocated for policy reforms to improve mental health coverage, but implementation remains inconsistent.

The rating of limited session availability and heavy caseload demands as major barriers (58.2% and 52.7% respectively) points to a workforce capacity problem in youth mental health services. The shortage of child and adolescent mental health professionals, particularly in rural and underserved areas, has been well-documented. This shortage is compounded by increasing demand for services, as rates of youth mental health problems, including suicidality, have risen substantially over the past decade. Without addressing fundamental capacity limitations through workforce expansion and more efficient service delivery models, improvements in clinical practices may have limited population-level impact.

The moderate rating of lack of specialized training as a barrier (33.8% rating as major barrier) suggests that while training needs exist, they are not perceived as the primary obstacle to effective practice. This finding may reflect increased availability of suicide prevention training in recent years, including widespread dissemination of gatekeeper training programs and evidence-based intervention protocols. However, the positive relationship between specialized training hours and treatment effectiveness in this study indicates that enhanced training does contribute to better outcomes, suggesting that continued investments in professional development are warranted even if training gaps are not the most pressing barrier.

The identification of client nonadherence and family non-engagement as substantial barriers (46.4% and 42.3% respectively rating as major barriers) highlights the challenge of maintaining therapeutic engagement with suicidal youth and their families. Research consistently shows that treatment dropout is elevated among suicidal populations, with rates often exceeding 50%. Factors contributing to nonadherence include ambivalence about treatment, symptom severity, family conflict, stigma, and practical barriers such as

transportation. Development and evaluation of engagement enhancement strategies, including motivational interviewing approaches, family psychoeducation, and removal of practical barriers, represents an important direction for future research and practice improvement efforts.

Policy advocacy efforts should target insurance coverage expansion, improved reimbursement rates, and elimination of arbitrary session limits for youth mental health services, particularly for those at elevated suicide risk. Healthcare systems and agencies should evaluate counselor caseload sizes to ensure clinicians have adequate time to provide quality care. Workforce development initiatives should include recruitment into mental health professions, retention strategies, and task-shifting models that enable more efficient use of available professional resources. Interventions to enhance treatment engagement and family involvement should be integrated into standard suicide prevention counseling protocols.

The barrier measure relied on subjective perceptions and may not fully capture objective constraints on practice. Future research should employ mixed methods approaches combining survey data with qualitative interviews and organizational assessments to characterize barriers across multiple ecological levels comprehensively. Intervention research testing strategies to mitigate specific barriers would provide evidence for system improvement efforts. Cost-effectiveness analyses of alternative service delivery models (e.g., telehealth, collaborative care, peer support integration) could identify approaches to expand capacity while maintaining quality.

Theoretical Implications and Integration

The findings of this study provide empirical support for integrative theoretical frameworks that emphasize the multifaceted nature of suicide risk and the importance of addressing both risk and protective factors. The Interpersonal Theory of Suicide, which identifies perceived burdensomeness, thwarted belongingness, and acquired capability as key constructs, is supported by the high prioritization of social isolation and family dysfunction as risk factors and family connectedness and peer support as protective factors in clinical practice. The finding that emotion dysregulation was frequently assessed and highly prioritized aligns with the emphasis on emotional and cognitive processes in contemporary suicide models (Ketabchi et al., 2025).

However, the study also reveals gaps between theoretical models and clinical practice. For instance, the Interpersonal Theory emphasizes acquired capability for suicide—developed through repeated exposure to painful or fear-inducing experiences—as a critical distinguishing factor between those who experience suicidal ideation and those who make attempts. Yet, explicit

assessment of acquired capability was not prominently featured in the intervention approaches reported by participants. Similarly, while theoretical models emphasize the dynamic, fluctuating nature of suicide risk and advocate for continuous monitoring and flexible intervention, the study did not specifically assess practices related to ongoing risk monitoring or adaptive treatment planning.

The strong predictive value of protective factors emphasis in the regression model, independent of risk factors addressed, provides support for dual-process models that conceptualize risk and protective factors as distinct dimensions rather than opposite ends of a single continuum. This finding suggests that effective suicide prevention requires not only reducing vulnerabilities but also actively building strengths and resources. This perspective aligns with positive psychology approaches emphasizing well-being enhancement alongside symptom reduction.

Training in suicide prevention should incorporate comprehensive theoretical frameworks that address both risk reduction and resilience building. Assessment protocols should specifically evaluate constructs identified in leading theoretical models, including acquired capability, motivational factors, and volitional factors. Treatment planning should address multiple levels of influence on suicide risk, including individual psychological factors, interpersonal relationships, and broader social-contextual factors. Research should continue testing and refining theoretical models to enhance their clinical utility and empirical precision.

The study did not directly assess participants' theoretical orientations or their application of specific theoretical models, limiting inferences about theory-practice linkages. Future research should explicitly examine how clinicians' theoretical understanding shapes their assessment and intervention practices. Research testing specific theoretical propositions through experimental manipulation would advance understanding of causal mechanisms underlying suicide risk and resilience. Development of practice guidelines that explicitly link theoretical constructs to assessment and intervention procedures would facilitate theory-driven clinical practice.

Study Limitations

Several limitations of this study warrant consideration when interpreting findings. First, the cross-sectional design precludes causal inferences about relationships among variables. While the regression analyses identified significant predictors of treatment effectiveness, reverse causation or third variables may account for observed associations. Longitudinal research is

needed to establish temporal precedence and examine change processes over time.

Second, all data were collected through self-report surveys, which are subject to multiple biases including social desirability, recall error, and subjective interpretation. Clinicians' estimates of treatment outcomes may be overly optimistic, and their reports of intervention practices may reflect aspirations rather than actual behavior. Future research should supplement self-report with objective measures such as chart reviews, recorded sessions, standardized assessment scores, and administrative data on actual suicide attempts and completions.

Third, the sample consisted of mental health professionals recruited through professional organizations, which may limit generalizability to clinicians who are not members of such organizations. Additionally, the moderate response rate (42.3%), while acceptable for survey research, raises questions about potential response bias. Clinicians with more favorable views of their suicide prevention work or stronger interest in the topic may have been more likely to participate.

Fourth, the study focused exclusively on counseling interventions provided by individual clinicians and did not capture broader system-level interventions, public health approaches, or roles of other professionals (e.g., psychiatrists, pediatricians) in youth suicide prevention. The findings therefore provide an incomplete picture of the full array of prevention efforts.

Fifth, the treatment effectiveness outcome relied on clinicians' aggregated estimates of client outcomes rather than data from specific cases. This approach does not capture within-clinician variability across clients and may be influenced by clinicians' general perceptions of their competence. Future research should employ client-level data with standardized outcome measures.

Sixth, the study did not assess fidelity to evidence-based protocols or quality of intervention implementation, factors that may be as important as intervention type in determining effectiveness. Similarly, the study did not capture important process variables such as therapeutic alliance, session attendance patterns, or concurrent services received by clients.

Finally, the study was conducted exclusively in the United States, limiting generalizability to other healthcare contexts and cultural settings. Cross-national research is needed to understand how healthcare system characteristics, cultural factors, and resource availability influence suicide prevention practices and outcomes.

Directions for Future Research

Building on the findings and limitations of this study, several priorities for future research emerge. First, longitudinal studies examining the relationship between specific intervention approaches, clinician characteristics, and client outcomes over time would provide stronger evidence for causal relationships and illuminate pathways to effective suicide prevention. Prospective designs that follow suicidal youth from initial contact through treatment and extended follow-up periods, while challenging and resource-intensive, would yield invaluable insights into treatment trajectories and long-term outcomes.

Second, implementation research is needed to identify effective strategies for disseminating evidence-based suicide prevention interventions and supporting their sustained use in diverse practice settings. Such research should examine multilevel implementation determinants (clinician, organizational, system) and test implementation strategies tailored to address specific barriers. Particular attention should be given to implementation in under-resourced settings serving vulnerable populations.

Third, comparative effectiveness research using pragmatic trial designs is essential to determine which interventions work best for which youth under what circumstances. Rather than highly controlled efficacy trials, such research should embrace the heterogeneity of real-world clinical populations and settings to inform clinical decision-making. Moderator analyses examining how intervention effectiveness varies based on client characteristics (e.g., age, gender, sexual orientation, race/ethnicity, psychiatric comorbidity, suicide attempt history) would support precision medicine approaches to suicide prevention (Jeong et al., 2025).

Fourth, research on mechanisms of change in suicide prevention interventions is needed to understand how and why interventions work. Studies employing mediation analyses, intensive longitudinal designs, and experimental manipulation of hypothesized mechanisms would advance theoretical understanding and inform intervention refinement. Particular attention should be given to examining whether different interventions operate through common or distinct mechanisms.

Fifth, research addressing treatment engagement and retention is critical given the high dropout rates observed in this study and documented in prior research. Experimental studies testing engagement enhancement strategies, qualitative research examining barriers to continuation from youth and family perspectives, and implementation research on system-level approaches to improving continuity of care would address this important gap.

Sixth, economic evaluation research is needed to inform resource allocation decisions and policy. Cost-effectiveness analyses comparing

different intervention approaches, examining optimal service delivery models, and evaluating system-level investments (e.g., workforce expansion, technology-enhanced interventions) would provide evidence for decision-makers balancing effectiveness, reach, and resource constraints.

Finally, research examining disparities in access to suicide prevention services and outcomes across demographic groups is essential for advancing health equity. Such research should not only document disparities but also test interventions to reduce them, including culturally adapted interventions, community-based participatory approaches, and structural interventions addressing social determinants of mental health (Hartman et al., 2025).

This study provides a comprehensive examination of counseling intervention practices for youth suicide prevention in the United States, revealing both progress in evidence-based practice implementation and persistent challenges requiring attention. The frequent use of CBT and DBT, strong emphasis on protective factors and resilience building, and recognition of comprehensive psychosocial risk factors indicate meaningful alignment between research evidence and clinical practice. However, systemic barriers including limited resources, insurance constraints, and workforce capacity limitations substantially impede effectiveness, underscoring that advancing suicide prevention requires system-level reforms alongside continued enhancement of clinical practices.

The findings highlight suicide prevention as a specialized competency requiring targeted training, ongoing professional development, and organizational support. Investments in counselor education, evidence-based intervention dissemination, and mental health infrastructure are essential to address the youth suicide crisis. Ultimately, effective suicide prevention demands a multifaceted approach integrating clinical excellence, systemic capacity, and policy support to create environments in which all youth can receive timely, high-quality, culturally responsive care that addresses both vulnerabilities and strengths.

CONCLUSION

This study examined counseling interventions for youth suicide prevention through a national survey of 364 mental health professionals. Key findings demonstrate that Dialectical Behavior Therapy and Cognitive-Behavioral Therapy are most effective when delivered by counselors with specialized training. Protective factors emphasis emerged as a critical predictor of treatment success, explaining 47% of outcome variance alongside counselor expertise. However, systemic barriers—including limited resources, insurance constraints, and workforce capacity issues—significantly impede

effectiveness. Actionable implications include: training programs must provide intensive, competency-based education in evidence-based suicide prevention interventions, healthcare organizations must invest in infrastructure reducing systemic barriers and policymakers must expand coverage, improve reimbursement, and strengthen workforce capacity. Future research should employ longitudinal designs, comparative effectiveness studies, and health equity investigations. Ultimately, effective youth suicide prevention requires coordinated enhancement of clinical competencies, organizational capacity, and policy support to ensure all at-risk youth receive timely, culturally responsive care.

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