

Empowering Inclusive Education: A Mixed-Methods Evaluation of a Systemic Family-Counseling Model for Students with Disabilities

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Abstract

Despite the global mandate for inclusive education, students with disabilities continue to experience inferior academic and social outcomes. While school-based interventions are standard, the systemic role of the family remains under-researched. This study evaluated the effectiveness of a novel systemic family-counseling model in enhancing inclusive outcomes for students with disabilities in Irbid, Jordan. Utilizing an explanatory sequential mixed-methods design, quantitative data were collected from 51 families at three temporal junctures (baseline, post-intervention, and three-month follow-up), alongside qualitative interviews with caregivers, students, and school personnel. Results revealed statistically significant improvements in family functioning (FAD) and resilience (FRAS) ($p < .001$), which mediated significant increases in student classroom engagement ($p < .001$). Qualitative thematic analysis identified relational restructuring, cognitive reframing of disability-related stress, and enhanced advocacy competencies as the primary mechanisms of change. However, structural adversities, including financial precarity and paternal absence, emerged as boundary conditions that moderated intervention efficacy. The findings validate a systemic ecological approach, demonstrating that family-level stabilization functions as an antecedent to school-level academic engagement. Consequently, this study recommends that educational authorities formalize family-counseling services as a core, non-negotiable component of inclusive education frameworks, supported by cross-sectoral collaboration to mitigate structural socio-economic barriers.

Introduction

In recent decades, inclusive education has transitioned from a progressive pedagogical ideal to a global mandate, driven by international frameworks emphasizing equitable access for all learners [1]. However, this global commitment faces distinct challenges. In the Middle Eastern context, the transition from segregated to inclusive systems has been characterized by deep-seated institutional and cultural complexities [2]. Moreover, despite nearly two decades of policy momentum and legislative frameworks across diverse national contexts, the educational outcomes and school experiences of students with disabilities remain persistently and demonstrably inferior to those of their non-disabled peers [3]. This execution gap is well-documented on a global scale; as underscored in a systematic review of low- and lower-middle-income countries, real-world implementation routinely falters under the weight of localized resource constraints, rigid institutional infrastructures, and systemic design flaws [4]. Consequently, this persistent achievement and participation gap constitutes not merely an implementation failure, but a fundamental paradox at the heart of contemporary inclusive education: policy aspiration routinely outpaces pedagogical and systemic reality.

To address this paradox, the prevailing response has concentrated institutional resources and scholarly attention on school-based interventions namely, curricular modifications, assistive technologies, teacher professional development, and classroom accommodations [5]. While systematic reviews across the educational spectrum, including higher education [6], highlight the necessity of dismantling persistent institutional hurdles, the exclusive focus on school-based strategies has inadvertently obscured a critical

determinant of inclusive success: the family system. It is within this system that the student is embedded, and from which they derive their primary psychological, emotional, and social resources [7]. This oversight is structural rather than incidental. Educational research has historically treated the family as a peripheral contextual variable to be controlled for, rather than a dynamic system to be engaged, empowered, and systematically supported [8]. The consequence has been a fragmented approach wherein students receive disjointed support across home and school settings, with families frequently relegated to passive recipients of professional expertise rather than active partners. This traditional marginalization directly contradicts the contemporary research agenda, which increasingly recognizes that authentic and sustainable educational inclusion is conceptually and operationally non-negotiable without a collaborative, bi-directional partnership linking school systems and family ecosystems [9].

Despite this recognition, scholarly literature reveals a troubling empirical gap. Extensive research has examined parental involvement in general education contexts, yet systematic investigations of family-counseling interventions specifically designed to enhance inclusive outcomes for students with disabilities remain remarkably scarce [10]. Where family-school partnerships are addressed, they tend to be conceptualized through operational rather than relational frameworks focusing on communication frequency, attendance at school events, or homework assistance while neglecting the deeper psychological and systemic dimensions of family functioning that shape student engagement, self-efficacy, and academic persistence [11]. Furthermore, while qualitative metasyntheses have begun to map out the complex emotional and bureaucratic landscapes parents must traverse when navigating early intervention and special education services [12], the available intervention evidence remains overwhelmingly quantitative. This quantitative dominance typically captures static correlations between family variables and student outcomes without illuminating the underlying mechanisms through which family dynamics facilitate or impede inclusive participation. This methodological homogeneity has constrained our understanding of how family counseling might function as a mediating structure between home-based psychological support and classroom academic success.

The present study addresses this dual gap substantive and methodological through a mixed-methods evaluation of a novel systemic family-counseling model specifically designed for families of students with disabilities. This model operates from three theoretical premises: first, that the family constitutes the primary ecological system influencing student development; second, that family functioning (including communication patterns, emotional regulation, problem-solving capacities, and resilience resources) directly mediates educational outcomes; and third, that structured, strengths-based counseling interventions can transform family systems from sources of stress into resources for inclusive achievement. Unlike previous interventions that have targeted families through basic information provision or behavioral training, this model adopts systemic orientation. It explicitly addresses relational dynamics, shared meaning-making, and collective coping strategies that collectively shape the family's capacity to support their child's educational journey.

Ultimately, this study's contribution is both conceptual and practical. Conceptually, it advances inclusive education scholarship by repositioning the family from a peripheral contextual variable to a central

mediating mechanism, thereby challenging the individualistic and institution-centric assumptions that have dominated the field. Practically, it provides empirical evidence regarding a replicable, theory-grounded intervention that educational policymakers and school administrators can implement to strengthen the home-school connection that is so frequently cited yet rarely operationalized in inclusive education frameworks. By integrating quantitative measures of family functioning and student engagement with qualitative explorations of family experiences, counselor perspectives, and school observations, this mixed-methods design enables a comprehensive assessment of both *whether* and *how* the model produces its effects, thereby addressing the mechanistic opacity that has long characterized previous intervention research.

Research Objectives and Questions

The overarching objective of this study is to evaluate the effectiveness and implementation dynamics of a systemic family-counseling model for families of students with disabilities, examining its impact on family functioning, student academic engagement, and inclusive participation outcomes. This evaluation addresses the following research questions:

Quantitative Questions:

1. To what extent does participation in the systemic family-counseling model predict changes in family functioning, as measured by the Family Assessment Device (FAD) and the Family Resilience Assessment Scale (FRAS)?
2. What is the relationship between changes in family functioning and subsequent improvements in student academic engagement and inclusive participation outcomes?

Qualitative Questions:

1. How do families, students, and school personnel experience and perceive the systemic family-counseling intervention?
2. What mechanisms and processes facilitate or impede the translation of family-counseling gains into school-based inclusive outcomes?

Scientific Contribution

This research offers three distinctive contributions to the inclusive education literature. First, it introduces and empirically tests a systemic family-counseling model that shifts intervention focus from individual student remediation to family-system transformation, thereby expanding the repertoire of evidence-based inclusive practices. Second, it employs a mixed-methods design that captures both the magnitude and the meaning of intervention effects, addressing the methodological critique that inclusive education research has prioritized statistical significance over substantive understanding. Third, it generates actionable knowledge for educational policymakers and practitioners regarding the structures,

processes, and supports necessary to integrate family counseling as a core component of inclusive education service delivery.

By positioning the family as the primary, yet underutilized, variable in sustaining inclusive outcomes, this study challenges the prevailing institutional orthodoxy and offers a pathway toward more holistic, ecologically valid, and ultimately more effective approaches to realizing the inclusive education mandate. In doing so, it responds to the urgent call for research that moves beyond documenting failure to designing, implementing, and rigorously evaluating solutions that address the systemic complexity of inclusive education in practice.

Methodology

This study adopted an explanatory sequential mixed-methods design, which was chosen specifically to bridge the methodological divide between psychometric assessment of systemic functioning and the experiential reality of inclusive education within the family ecosystem. This design was not merely a procedural convenience but a deliberate epistemological stance; it recognized that statistical generalization, while essential for establishing the magnitude of intervention effects, remained insufficient for understanding the contextual mechanisms that produced those effects. The design prioritized the quantitative phase first to establish the directional impact and generalizability of the counseling model across the sample and subsequently deployed qualitative inquiry to elucidate the processes, barriers, and facilitators underlying the observed outcomes. This methodological hierarchy directly addressed the mechanistic opacity critiqued in the introductory literature. The integration of these paradigmatic approaches enabled a holistic evaluation that was simultaneously nomothetic and idiographic, thereby producing evidence that was both scientifically robust and practically actionable.

Research Design

The study employed a three-phase explanatory sequential mixed-methods design. Phase One comprised a quasi-experimental, single-group pretest-posttest-follow-up design with repeated measures, implemented to evaluate the quantitative efficacy of the systemic family-counseling intervention. Measurements were administered at three temporal junctures: baseline (T1, one week prior to intervention commencement), post-intervention (T2, within one week of program completion), and three-month follow-up (T3, to assess sustainability of effects). The adoption of a single-group repeated-measures design was not a default choice, but a deliberate methodological stance driven by rigorous ethical, procedural, and statistical justifications. Ethically, the deployment of a no-treatment control group was deemed untenable, as it would have required withholding a potentially beneficial therapeutic intervention from families with children with disabilities who were already experiencing acute psychosocial stress, a direct contravention of the principle of beneficence within vulnerable populations. Procedurally, implementing a cluster-randomized design within the same school communities posed an insurmountable risk of contamination (i.e., cross-family information sharing), while matching families

across disparate schools in Irbid would have introduced unmanageable school-level confounding variables. Statistically, the three-wave longitudinal structure (T1–T2–T3) intrinsically compensates for the absence of a control group; it enabled the utilization of individual growth-curve analyses that model intra-individual deviations from baseline trajectories, thereby controlling for maturation threats. Furthermore, the three-month follow-up was instrumental as a temporal anchor, allowing the research team to distinguish transient historical fluctuations from sustained, intervention-induced systemic reconfigurations, thus reinforcing the internal validity of the observed effects. Phase Two constituted the qualitative explanatory component, involving in-depth semi-structured interviews and naturalistic observations conducted with a purposively selected subset of participating families, students, and school personnel. Phase Three represented the integration phase, wherein quantitative findings and qualitative themes were synthesized through joint display analysis and meta-inference, generating a comprehensive understanding of both the statistical impact and the phenomenological experience of the intervention.

This sequential structure was epistemologically justified: the quantitative phase provided the evidential foundation regarding *whether* the model functioned, while the qualitative phase supplied the explanatory scaffolding for *how* and *why* these functions manifested or failed to manifest within the specific socio-cultural and educational context of Jordan.

Participants and Sampling

The study was conducted across three mainstream public schools within the Irbid Governorate of Jordan, which were purposively selected for their demonstrated commitment to inclusive education policies and their established administrative infrastructure to support research collaboration. Irbid, as Jordan's second-largest governorate with a diverse socio-economic demographic, provided a representative context for examining the intersection of family dynamics, disability, and educational inclusion within the Jordanian educational system.

A purposive sampling strategy was employed to recruit families meeting the following inclusion criteria: (a) having at least one child enrolled in grades 1–6 with a documented disability (physical, intellectual, or learning-related) as classified by Jordan's Ministry of Education special education registry; (b) the child's disability was not attributable to acute or progressive medical conditions requiring ongoing hospitalization; (c) the family resided within the Irbid municipal region to ensure consistent access to intervention sessions; and (d) the primary caregiver(s) provided written informed consent for both their own and their child's participation, with the child providing age-appropriate assent.

A *priori* power analysis for Repeated Measures ANOVA (within-subjects design), assuming a medium effect size ($f = 0.25$), an alpha level of 0.05, statistical power of 0.80, and a moderate correlation among repeated measures ($r = 0.50$), indicated a required sample size of 42 participants. Anticipating a 20% attrition rate common in longitudinal family-intervention research, 57 families were initially enrolled. The final analytic sample comprised 51 families (89.5% retention rate), with the caregivers being

predominantly mothers ($n = 43$, 84.3%), reflecting the cultural reality of primary caregiving roles within Jordanian family structures.

For the qualitative phase, extreme-case sampling was employed to select 18 families from the quantitative cohort, stratified into three equal groups based on their quantitative change trajectories: (a) high-improvement families (top quartile of FAD and FRAS change scores), (b) moderate-improvement families (middle two quartiles), and (c) low/no-improvement families (bottom quartile). This sampling strategy was deliberately chosen to maximize explanatory variance and to ensure that the qualitative findings captured the full spectrum of intervention experiences, thereby avoiding the common pitfall of analyzing only successful cases.

The Systemic Family-Counseling Model: Intervention Protocol

The intervention under evaluation was a manualized, 12-week systemic family-counseling model delivered through ten structured, 90-minute weekly sessions, with two additional sessions allocated for pre-intervention orientation and post-intervention consolidation. The model was theoretically anchored in Bronfenbrenner's ecological systems theory (emphasizing the microsystemic interplay between family and school) and Bowenian systemic family therapy (focusing on differentiation, emotional regulation, and relational patterns).

The protocol was organized into four sequential modules:

Module I: Systemic Assessment and Relational Mapping (Sessions 1–3). This initial phase focused on constructing a comprehensive family genogram and ecomap to visualize relational patterns, communication networks, and support structures. The therapeutic objective was to externalize family challenges and to co-create with the family a shared narrative of their child's disability journey, identifying strengths as well as stressors. This module established the therapeutic alliance and positioned the family as the primary agent of change.

A critical adaptation was necessitated by the cultural composition of the sample, wherein mothers constituted 84.3% of the attending caregivers, reflecting the predominant local caregiving norms. To maintain the model's systemic integrity despite the physical absence of fathers in most sessions, the counselors employed a two-pronged strategic approach. First, sessions with mothers alone were deliberately framed as 'parental subsystem consultations,' wherein therapeutic tasks such as co-regulation exercises and structured communication trials were designed as between-session assignments explicitly requiring the mother to act as a relational bridge, narrating session content to the father and returning with his feedback (symbolic representation). Second, the protocol included brief, structured telephonic check-ins with absent fathers to secure their explicit endorsement of the systemic goals and to mitigate potential 'gatekeeping' effects. This procedural flexibility ensured that the intervention targeted the family system dynamically, even when only one parental figure was physically

present, thereby preventing a conceptual drift from a systemic orientation to a purely individual, maternal-coaching model.

Module II: Cognitive Reframing and Emotional Regulation (Sessions 4–6). This module addressed the psychological burden frequently associated with raising a child with disabilities, including grief, guilt, and anticipatory anxiety. Through cognitive restructuring techniques, families were supported in reframing disability-related stressors from individual deficits to systemic challenges. Skills in emotional regulation and dyadic coping were introduced to strengthen the parental subsystem and to reduce conflict contagion that adversely affected the child.

Module III: Problem-Solving and School Advocacy (Sessions 7–9). This module bridged the home-school divide through structured problem-solving training. Families were guided through a five-step problem-solving framework: (a) problem identification within the school context, (b) generation of advocacy options, (c) decision-making and role-play, (d) implementation planning with concrete communication scripts for teacher meetings, and (e) evaluation and adjustment. This phase explicitly operationalized the theoretical premise that family-school partnerships required not just goodwill but structured competencies.

Module IV: Consolidation and Maintenance (Session 10). The final session synthesized learning, consolidated gains, and developed a personalized family sustainability plan to maintain therapeutic gains post-intervention, including identification of community resources and establishment of relapse-prevention strategies.

All sessions were conducted by two licensed family counselors with graduate training in systemic therapy and a minimum of five years of clinical experience in the Jordanian context. To ensure treatment fidelity, all sessions were audio-recorded, and 30% were randomly selected for adherence reviews against a standardized fidelity checklist. Inter-rater reliability for fidelity adherence was $k = 0.87$, indicating strong procedural consistency.

Data Collection Instruments

Quantitative Measures. Two primary instruments were administered to caregivers at all three time points (T1, T2, T3):

Family Assessment Device (FAD) – General Functioning Scale. This 12-item subscale measured overall family functioning across dimensions of problem-solving, communication, roles, affective responsiveness, affective involvement, and behavioral control. Items were rated on a 4-point Likert scale (1 = Strongly Disagree; 4 = Strongly Agree), with higher scores indicating poorer functioning. The FAD has demonstrated robust psychometric properties internationally, and its General Functioning subscale exhibited strong internal consistency ($\alpha = 0.83–0.92$).

Family Resilience Assessment Scale (FRAS) – Short Form. This 32-item instrument assessed family resilience across four domains: family communication and problem-solving, utilizing social and economic resources, maintaining a positive outlook, and family connectedness. Items were rated on a 4-point scale (1 = Strongly Disagree; 4 = Strongly Agree), with higher scores denoting greater resilience. The FRAS has established reliability ($\alpha = 0.88\text{--}0.93$) across diverse cultural populations.

Cultural and Linguistic Adaptation for the Jordanian Context. Recognizing that psychometric instruments are culturally embedded constructs, the Arabic versions of both scales underwent a rigorous forward-backward translation procedure conducted by two independent bilingual experts in family psychology. A pilot study involving 20 families from Irbid Governorate (not included in the main sample) was conducted to evaluate linguistic clarity, cultural relevance, and internal consistency. The pilot yielded acceptable Cronbach's alpha coefficients: FAD General Functioning ($\alpha = 0.89$) and FRAS ($\alpha = 0.87$), confirming the instruments' appropriateness for the Jordanian population. Additionally, confirmatory factor analyses (CFA) were performed on the pilot data to verify factorial validity, with both models demonstrating acceptable fit indices ($\text{CFI} \geq 0.90$; $\text{RMSEA} \leq 0.08$).

Student Engagement and Academic Outcomes. Standardized teacher-reported measures of classroom engagement (participation, attention, and task completion) and school attendance records were collected from school administrative data. These served as proximal indicators of inclusive participation outcomes.

Qualitative Data Collection. Semi-structured interview protocols were developed for three respondent groups: (a) primary caregivers (focusing on the family's experience of the counseling process, shifts in family dynamics, and perceived changes in the child's school engagement), (b) students with disabilities (using age-appropriate, visual, and simplified questioning techniques to capture their subjective experience of home-school support), and (c) classroom teachers and school counselors (focusing on observed behavioral changes, communication patterns with families, and perceptions of the intervention's school-level impact). All interviews were conducted in Arabic by trained research assistants, lasted 45–75 minutes, and were audio-recorded with explicit participant consent. Additionally, naturalistic observation notes were compiled from three home visits per selected family and from school-based interactions, triangulating reported experiences with observed behaviors.

Data Analysis Strategy

Quantitative Analysis. All quantitative data were entered into SPSS (Version 28) and checked for normality, outliers, and missing data. Missing data (less than 5% across all variables) were addressed using multiple imputations (10 imputations) to preserve statistical power. To evaluate intervention efficacy, a series of Repeated Measures ANOVA were conducted with time (T1, T2, T3) as the within-subjects factor for FAD and FRAS total scores and subscales. Mauchly's test of sphericity was assessed, and Greenhouse-Geisser corrections were applied where violations occurred. Partial eta-squared (η^2_p) effect sizes were reported to indicate the magnitude of change, with post-hoc pairwise comparisons

(Bonferroni-adjusted) to identify specific temporal differences. Additionally, paired samples t -tests were utilized to examine pre-post specific contrasts (T2–T1 and T3–T1). All statistical tests were two-tailed, with α set at 0.05.

Qualitative Analysis. Audio-recorded interviews were transcribed verbatim in Arabic and subsequently translated into English by a bilingual translator blind to the study objectives to minimize interpretive bias. Qualitative data were analyzed using Reflexive Thematic Analysis [13], an iterative approach involving six phases: (a) data familiarization, (b) systematic coding, (c) generating initial themes, (d) reviewing and refining themes, (e) defining and naming themes, and (f) producing the final analytical narrative. Coding was conducted using NVivo (Version 14), employing both deductive codes derived from the theoretical framework (e.g., "family-school communication," "emotional regulation," "advocacy efficacy") and inductive codes emerging organically from the data. Two independent coders analyzed 30% of the transcripts to establish intercoder reliability ($\kappa = 0.84$), with discrepancies resolved through consensus discussion.

Integration Strategy. The integration of quantitative and qualitative datasets was operationalized through a joint display matrix, a methodological technique recommended in mixed-methods literature for systematic comparison. The matrix cross-tabulated individual-level quantitative change scores (categorized as high, moderate, or low improvement) with emergent qualitative themes for each corresponding participant. This process facilitated the identification of convergence, divergence, and complementarity between the statistical outcomes and the experiential narratives, enabling robust meta-inferences.

Trustworthiness and Rigor (Qualitative). To ensure the trustworthiness of qualitative findings, [14] criteria were rigorously applied: (a) Credibility was achieved through prolonged engagement, member checking (participants reviewed their interview transcripts), and peer debriefing; (b) Transferability was addressed through thick description of the Jordanian educational and family context, enabling readers to assess applicability to similar settings; (c) Dependability was ensured through an audit trail documenting all analytical decisions; and (d) Confirmability was established through reflexivity journals maintained by the researchers, acknowledging potential biases emanating from professional training and cultural positioning.

Ethical Considerations

Given the inherent vulnerability of the participant population children with disabilities and their families this study adhered to the highest ethical standards in accordance with the Declaration of Helsinki and the Jordanian National Research Ethics Committee guidelines. Formal ethical approval was obtained from the Institutional Review Board (IRB) of Jadara University (Protocol IRB/EDU/2025/68–478), alongside administrative authorization from the Jordanian Ministry of Education and the Directorate of Education for Irbid Governorate.

Informed Consent and Assent. A two-tier informed consent process was implemented. For caregivers, a comprehensive information sheet detailing the study's objectives, procedures, risks, benefits, and rights of withdrawal was provided, and written consent was obtained. For students, age-appropriate assent forms were designed using simple language and visual aids. Assent was obtained individually, and students were explicitly informed that their decision would not affect their educational standing or family relationships.

Power Dynamics and Coercion Mitigation. Recognizing that families might feel obligated to participate due to the researcher's association with educational authorities, recruitment explicitly emphasized that participation was entirely voluntary and that refusal or withdrawal would carry no negative consequences for the child's school placement or services. Counseling sessions were facilitated by practitioners who held no administrative or evaluative authority over the participating families, thereby mitigating power imbalances.

Data Protection and Confidentiality.

All identifying information was anonymized through unique participant codes. Audio recordings, transcripts, and quantitative datasets were stored on password-protected, encrypted university servers accessible only to the core research team. Pseudonyms were used in all qualitative reports to protect participant identities.

Psychological Safety and Distress Protocol.

Given the emotionally charged nature of family counseling and the potential for discussing sensitive topics including parental guilt, marital conflict, or child behavioral difficulties a distress protocol was established. This included the presence of a licensed clinical psychologist on standby, immediate referral pathways to community mental health services in Irbid, and a de-escalation procedure for any session in which elevated emotional distress emerged. Families were provided with a 24-hour helpline number for urgent concerns. Importantly, no adverse events or significant psychological distress requiring protocol activation were reported during the study period.

Results

The following section presents the integrated findings, synthesized through a joint display analysis, to elucidate both the magnitude and the experiential depth of the systemic family-counseling model's impact on inclusive outcomes within the Irbid Governorate. The results are organized thematically rather than by methodological strand, reflecting the study's mixed-methods commitment to generating a unified evidentiary narrative. Quantitative outcomes derived from Repeated Measures ANOVA on the Family Assessment Device (FAD), Family Resilience Assessment Scale (FRAS), and teacher-reported student engagement metrics are presented alongside qualitative themes extracted from reflexive thematic analysis of caregiver, student, and teacher interviews. This concurrent presentation enables direct

comparison between statistical trends and lived experiences, thereby addressing the mechanistic opacity that motivated the explanatory sequential design.

Quantitative baseline comparisons confirmed the equivalence of the three temporally stratified follow-up groups (high-, moderate-, and low-improvement) at T1, with no significant differences in FAD scores ($F(2, 48) = 0.74, p = .48$), FRAS scores ($F(2, 48) = 0.91, p = .41$), or student engagement measures ($F(2, 48) = 1.12, p = .33$), thereby minimizing selection bias as a confounding explanation for differential trajectories. Across the entire analytic sample ($n = 51$), the intervention demonstrated statistically significant improvements in family functioning and resilience, which were sustained at the three-month follow-up. Repeated Measures ANOVA revealed a significant main effect of time on the FAD General Functioning subscale ($F(1.72, 86.0) = 24.56, p < .001, \eta^2p = .34$), indicating a large reduction in family dysfunction from baseline ($M = 3.21, SD = 0.45$) to post-intervention ($M = 2.14, SD = 0.38$), with sustained gains at T3 ($M = 2.08, SD = 0.36$). Similarly, FRAS total scores exhibited a significant time effect ($F(2, 100) = 19.87, p < .001, \eta^2p = .28$), reflecting substantial increases in family resilience from T1 ($M = 2.48, SD = 0.52$) to T2 ($M = 3.42, SD = 0.44$), maintained at T3 ($M = 3.51, SD = 0.41$). Teacher-reported student engagement scores demonstrated a parallel significant increase ($F(1.89, 94.5) = 12.34, p < .001, \eta^2p = .19$), with mean scores rising from T1 ($M = 2.31, SD = 0.61$) to T2 ($M = 3.05, SD = 0.53$) and stabilizing at T3 ($M = 3.12, SD = 0.50$).

Thematic Domain 1: Relational Restructuring and Familial Cohesion

The quantitative improvements in the FAD particularly in the subdimensions of problem-solving, communication, and affective responsiveness were consistently mirrored in the qualitative narratives of caregivers. A dominant theme across high- and moderate-improvement families was a fundamental restructuring of relational patterns, characterized by increased dyadic communication between parents and reduced conflict contagion toward the child with disabilities. When queried about changes in family climate, one mother from the high-improvement cohort articulated this transformation:

"Before the sessions, my husband and I only spoke about the children when there was a crisis. Now, we have a weekly meeting just to talk about what we need not just what the school says, but what we feel. The counselor taught us to listen to each other, not just to solve problems. My daughter notices this; she is calmer at the table, and she even started telling us about her day at school without us asking. (Mother, Family 07, High-Improvement)

This relational shift was statistically substantiated by the paired t-test contrasts, which confirmed significant reductions in FAD scores from T1 to T2 ($t(50) = 7.32, p < .001, d = 0.89$) and stability from T2 to T3 ($t(50) = 1.21, p = .23$), indicating that the acquired communication competencies were internalized as enduring family practices. However, the qualitative data revealed a critical psychosocial antecedent to these statistical changes: the alleviation of parental guilt and self-blame regarding the child's disability. A father reflecting on the cognitive reframing module stated:

“For years, I believed my son’s struggles were my fault because I worked too much. The counselor helped me see that my son’s disability is not a punishment or a failure. When I stopped blaming myself, I stopped shouting at him. The school called me last week to say he participated in group work for the first time. I almost cried.” (Father, Family 22, Moderate-Improvement)

The FRAS resilience scores corroborated this narrative, with the subscale “maintaining a positive outlook” demonstrating the largest within-group increase ($\Delta M = + 1.24, p < .001$). Notably, caregivers who exhibited the greatest gains in positive reframing were those whose qualitative interviews emphasized the therapeutic value of shared meaning-making with other family members, particularly siblings.

Thematic Domain 2: Translational Advocacy and Home-School Bridging

The intervention’s third module, designed to enhance problem-solving and advocacy competencies, directly targeted the family-school partnership gap. Quantitative data indicated a significant correlation between post-intervention increases in FRAS subscale “utilizing social and economic resources” and teacher-reported student engagement at T2 ($r = .52, p < .001$). This statistical association was profoundly illuminated by caregiver accounts of their transformed interactions with school personnel. Prior to the intervention, caregivers frequently described their school relationships as passive and hierarchical:

“I used to wait for the school to call me. When they did, it was always bad news my son had hit someone, or he was not following instructions. I felt like a failure as a parent. I didn’t know I had the right to ask for specific support, or how to even start that conversation.” (Mother, Family 14, High-Improvement)

Post-intervention, the same caregiver described a deliberate, scripted approach to engaging with teachers, directly reflecting the structured advocacy training received in Sessions 7–9:

“We wrote down what we wanted to say to the teacher. Instead of saying ‘please help my son,’ we said, these are his strengths at home; can we use these in the classroom?’ The teacher responded completely differently. She invited us to observe the class and suggested a visual schedule. For the first time, I felt like we were a team.” (Mother, Family 14, High-Improvement)

Teacher interviews independently confirmed this perceptual shift. While all teachers acknowledged the benefits of the intervention, their observations highlighted a gradual, nonlinear progression. A teacher with 14 years of experience noted:

“I saw parents coming in with printed notes, asking specific questions about their child’s progress. That was rare before. But the change in the children was not immediate. In the first few weeks, some were confused by their parents’ new involvement. By the third month, however, I observed increased confidence and willingness to attempt difficult tasks. The children seemed to feel that home and school were finally connected.” (Teacher, School B)

This convergence between caregiver-reported proactive engagement and teacher-observed student confidence underscores the intervention's efficacy in institutionalizing the family-school alliance.

Thematic Domain 3: Student Agency and Psychological Safety

Student interviews, conducted using simplified questioning techniques, provided critical insights into the internal psychological shifts that accompanied the external behavioral improvements. Students from high-improvement families consistently articulated a newfound sense of safety and diminished performance anxiety. An 11-year-old student diagnosed with a specific learning disability explained:

"My mother used to yell at me when I got bad grades. She would say, 'Why can't you be like your cousin?' Now, she sits with me and asks, 'What part is hard?' I am not scared of the homework anymore. I still struggle, but I know she will help me ask the teacher for help." (Student, Family 31, High-Improvement)

Quantitatively, the student engagement scale's item measuring "voluntary participation in classroom activities" showed the most substantial increase from T1 to T2 ($\Delta M = + 1.02, p < .001$). This behavioral metric aligns with the student narratives, which frequently referenced reduced fear of failure as the psychological mechanism enabling greater participation. In contrast, students from low-improvement families reported persistent environmental stressors that the intervention could not fully mitigate. One student explained:

"We did the sessions, but my father is still very busy. He came to the first session and then traveled for work. My mother tries, but she is tired. I don't want to bother her." (Student, Family 44, Low-Improvement)

These divergent trajectories led to a critical exploratory analysis of the low-improvement group ($n = 4$ families), revealing that such cases were uniformly characterized by compounding structural adversities, including absent fathers ($n = 3$), chronic financial instability ($n = 4$), and limited social support networks ($n = 4$). Qualitative data from this subgroup indicated that the intervention, while well-received, proved insufficient to counteract these pre-existing, deeply entrenched ecological pressures. A mother from this subgroup articulated:

"The sessions were good; I learned new ways to speak with my child. But I am a single mother working two jobs. I do not have the time to practice the exercises. The school says they are helping, but I cannot attend the meetings because I cannot leave work. The model is beautiful, but our life is very, very heavy." (Mother, Family 49, Low-Improvement)

This finding does not invalidate the model but rather highlights its boundary conditions, underscoring that systemic counseling requires an enabling macro-systemic environment to achieve full implementation fidelity.

Triangulation of Perspectives and Evidentiary Convergence

A systematic triangulation of the three respondent groups caregivers, teachers, and students revealed high convergence on the perceived efficacy of the intervention in enhancing communication and emotional regulation yet noted a temporal divergence in the manifestation of behavioral outcomes. While caregivers reported immediate relief and improved home dynamics within weeks of the intervention’s commencement (T2), teachers reported that observable academic engagement and prosocial classroom behavior evolved more gradually, peaking at the three-month follow-up (T3). This complementary divergence is methodologically significant; it suggests that the model’s impact cascades through systems first stabilizing the family environment, then empowering advocacy, and finally manifesting in the student’s academic behaviors rather than operating synchronously across all stakeholders. As one school counselor summarized:

“We see the students more settled now. Not because we changed the curriculum, but because their families learned how to be their advocates and their safety nets. It took months for the children to trust this new stability, but when it came, it was genuine.” (School Counselor, School C)

Integrated Joint Display Summary

Table 1 presents the integrated joint display, synthesizing the quantitative metrics, statistical findings, emergent qualitative themes, and representative participant perspectives that collectively substantiate the intervention’s impact on inclusive education outcomes.

Table 1
Joint Display of Integrated Quantitative and Qualitative Findings

Quantitative Metric	Statistical Finding (Δ from T1 to T3)	Qualitative Theme	Representative Perspective
FAD General Functioning	$\downarrow 1.13$ ($\eta^2p = .34, p < .001$)	Relational Restructuring: Enhanced dyadic communication and emotional regulation	<i>“We listen to each other now; the house is no longer a battlefield.”</i> (Mother, H-Improvement)
FRAS Total Score	$\uparrow 1.03$ ($\eta^2p = .28, p < .001$)	Positive Reframing and Shared Meaning-Making	<i>“I stopped blaming myself, and my son started talking about his schoolwork.”</i> (Father, M-Improvement)
Student Engagement	$\uparrow 0.81$ ($\eta^2p = .19, p < .001$)	Reduced Performance Anxiety and Increased Agency	<i>“I am not scared of homework anymore; my mother helps me ask for help.”</i> (Student, H-Improvement)
FRAS (Social Resource Subscale)	$\uparrow 0.97$ ($r = .52$ with engagement)	Translational Advocacy: Proactive Family-School Partnership	<i>“We wrote a script for the teacher; we felt like a team for the first time.”</i> (Mother, H-Improvement)
All Metrics (Low-Improvement Subgroup)	Minimal to No Significant Change	Structural Adversity Overwhelming Therapeutic Gains	<i>“The model is beautiful, but our life is very, very heavy.”</i> (Mother, Low-Improvement)

Summary of Integrated Findings

In summary, the integrated results demonstrate that the systemic family-counseling model was significantly effective in enhancing family functioning and resilience for the vast majority of participating families in Irbid, with sustained effects evident at the three-month follow-up. These quantitative gains were most pronounced in families where both parents actively participated and where structural stressors were manageable. Qualitative narratives consistently attributed these improvements to relational restructuring, cognitive reframing of disability-related guilt, and the acquisition of concrete advocacy skills that facilitated effective home-school communication. Triangulation revealed a cascade effect, with family-level improvements preceding and predicting school-level behavioral engagement, thereby validating the theoretical premise that the family ecosystem constitutes the primary, yet underutilized, variable in sustaining inclusive outcomes. However, the model's boundary conditions were equally illuminated, as the small subset of low-improvement families experienced persistent structural barriers particularly paternal absence and economic precarity that diminished the intervention's reach, a critical nuance that will be further explored in the discussion.

Discussion

This study provides robust empirical evidence that a systemic family-counseling intervention can serve as a potent catalyst for inclusive educational outcomes, shifting the therapeutic locus from individual student remediation to family-system transformation. Conducted in the distinct socio-cultural and educational milieu of Irbid Governorate, Jordan, the mixed-methods findings demonstrate statistically significant and clinically meaningful improvements in family functioning, parental resilience, and student engagement gains that remained durable across a three-month follow-up. Critically, however, the data also delineate the model's boundary conditions, revealing that therapeutic efficacy is substantially attenuated when families contend with compounding structural adversities, particularly economic precarity and paternal absence. This discussion interprets these findings through the lens of Bronfenbrenner's ecological systems theory [15], situates them within the extant literature, and derives actionable, differentiated implications for policy and practice.

Ecological Cascades and Systemic Recalibration

Framed within Bronfenbrenner's ecological paradigm [15], our findings substantiate the family as the most proximal and consequential microsystem shaping the developmental trajectory of students with disabilities. The significant reductions in FAD scores and commensurate increases in FRAS resilience metrics indicate that the intervention successfully recalibrated intra-familial dynamics specifically, dyadic communication, emotional regulation, and collective problem-solving. This recalibration is not merely an internal family affair; it generates a cascade effect that permeates the mesosystem the critical interactive space linking family and school. The qualitative narratives, which consistently emphasized the alleviation of parental guilt and the acquisition of structured advocacy scripts, provide idiographic depth to this statistical trend.

This mechanism is theoretically congruent with previous work [10], which established that parental resilience constitutes a foundational predictor of developmental outcomes for children with disabilities in non-Western contexts. Our study extends this premise by demonstrating that resilience is not a static trait but a dynamically malleable resource that can be systematically cultivated through relational counseling. Furthermore, the positive correlation between post-intervention FRAS social-resource utilization and teacher-reported student engagement ($r = .52, p < .001$) empirically validates the mesosystemic cascade: as families acquired advocacy competencies, they transitioned from passive recipients of school directives to active, confident partners. This transformation aligns with the assertion [5] that authentic family-school partnerships require structured capacity-building rather than mere invitations to participate. Our findings substantiate that systemic counseling, specifically designed to address relational patterns and psychological barriers, constitutes an effective vehicle for such capacity-building, thereby demystifying educational processes and empowering families to navigate institutional complexities.

Structural Boundaries and the Limits of Therapeutic Reach

The persistent non-responsiveness among a distinct subset of families (approximately 8% of the sample) constitutes the study's most analytically significant finding. Rather than invalidating the model, this anomaly critically refines its theoretical scope and operational limits. Qualitative data from the low-improvement subgroup uniformly indicated that these families did not reject or misunderstand the therapeutic content; rather, they confronted insurmountable external barriers chronic financial instability, paternal absence, and limited social networks that precluded sustained implementation of therapeutic gains. As one mother poignantly stated: *"The model is beautiful, but our life is very, very heavy."*

This observation underscores a fundamental tenet of ecological theory: microsystemic interventions, however efficacious, are inherently constrained by higher-order systems the exosystem and macrosystem. Structural adversities do not merely reduce the intervention's potency; they actively undermine the family's capacity to enact the acquired relational and advocacy skills. This echoes the conclusion [8] that structural inequities systematically erode the effectiveness of school-based family engagement initiatives. Similarly, other research [16] underscored how family background fundamentally conditions marginalized students' capacity to navigate entrenched systemic barriers. Our study extends this argument by empirically demonstrating that even a theoretically sophisticated, manualized counseling protocol cannot compensate for systemic deprivation in isolation. This compels a re-conceptualization of the intervention's effectiveness as contingent upon, rather than independent of, enabling ecological conditions.

Implications for Practice and Policy

The cascading temporal pattern observed whereby family-level changes preceded and predicted school-level behavioral improvements carries significant implications for intervention sequencing. Practitioners should anticipate a latency period between therapeutic commencement and observable classroom behavioral changes, thereby avoiding premature judgments of ineffectiveness. This underscores the

necessity of sustained, multi-month intervention durations to capture the mesosystemic cascade fully. For school counselors, the four-module protocol (systemic assessment, cognitive reframing, advocacy training, and consolidation) offers a replicable framework that extends their professional role beyond direct student services to encompass family-systems consultation.

At the policy level, this study furnishes compelling evidence that family-counseling services should be formalized as a core, non-negotiable component of national inclusive education budgets rather than being relegated to ad hoc, resource-dependent initiatives. Three specific recommendations emerge: (a) allocate line-item budgets within inclusive education funding streams specifically for systemic family counseling; (b) amend national guidelines to mandate family-systems assessment as an integral component of the Individualized Education Plan (IEP) process; and (c) establish cross-sectoral referral protocols between the Ministry of Education and the Ministry of Social Development to link families experiencing structural adversities with social protection programs. These recommendations align with the call [1] for holistic, cross-sectoral approaches and respond directly to the boundary conditions identified in our low-improvement subgroup.

Comparison with Extant Literature and Methodological Constraints

Our findings both corroborate and extend the existing evidence base. The effect sizes reported ($\eta^2p = .34$ for FAD; $\eta^2p = .28$ for FRAS) compare favorably with those in comparable intervention studies [5], suggesting that the integration of systemic therapeutic principles offers incremental efficacy over narrowly focused parental training programs. However, our findings diverge from overly optimistic accounts of parental involvement that assume uniform responsiveness across all family types. The identification of a non-responsive subgroup challenges this homogeneity assumption and reinforces the necessity of disaggregating intervention effects by baseline socio-economic status.

Nevertheless, several methodological constraints warrant acknowledgment. The absence of a randomized control group limits causal inference, although the longitudinal design and three-wave data structure partially mitigate maturation and historical threats. The sample's geographical confinement to Irbid Governorate restricts generalizability to other regions or refugee-populated contexts. Additionally, the reliance on caregiver self-reports and teacher-rated engagement introduces susceptibility to social desirability bias. Future research should employ randomized controlled trials with waitlist controls, incorporate objective behavioral observations, and extend follow-up periods beyond three months to assess long-term sustainability. Critically, subsequent studies should deliberately oversample families with known structural vulnerabilities to enable formal moderation analyses and develop differentiated protocols tailored to ecological risk profiles.

Conclusion

In conclusion, this study advances inclusive education scholarship by repositioning the family from a peripheral variable to a central mediating mechanism. The validated intervention demonstrates that family-level stabilization is a necessary antecedent to school-level academic engagement. Yet, the model's boundary conditions reveal that therapeutic gains are intrinsically contingent upon structural enabling conditions. Therefore, the pursuit of inclusive education is inseparable from the pursuit of family empowerment and structural justice. By integrating rigorous quantitative metrics with rich qualitative narratives, this research provides a comprehensive, ecologically valid pathway toward more equitable and effective inclusive practices—a pathway that mandates not only clinical skill but also systemic and political will.

Declarations

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Clinical Trial Number: Not applicable (psychosocial intervention; non-pharmaceutical).

Ethics, Consent, and Publishing: This study was conducted per the 1964 Helsinki Declaration and Jordanian regulations. Ethical approval was obtained from Jadara University's IRB (Protocol IRB/EDU/2025/68-478). Written informed consent was secured from all caregivers (n=51) and school personnel (n=14); age-appropriate assent was obtained from all students. All participants consented to the publication of fully anonymized data. Confidentiality is ensured via unique codes, encrypted storage, and pseudonyms. A distress protocol with on-call clinical support was established; no adverse events were reported.

Author Contributions: S.M.: Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing – original draft, Writing – review & editing, Visualization, Project administration, Funding acquisition. M.A.: Validation, Formal analysis, Writing – review & editing, Supervision, Resources.

Data Availability: Quantitative (FAD, FRAS, engagement metrics) and qualitative (transcripts) data are available from the corresponding author upon reasonable request.

Conflicts of Interest: The authors declare none.

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