

PEER REJECTION IN ADHD: A RELATIONAL ECOLOGY FRAMEWORK

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ABSTRACT

Social difficulties, including peer rejection, low friendship quality, and social isolation, are among the most well-documented and treatment-resistant features of childhood ADHD, often persisting even after core symptoms improve. Despite decades of research, social skills training (SST) programs have yielded only modest improvements in peer acceptance and friendship quality, revealing a fundamental mismatch between prevailing theoretical models and the relational realities of children's social lives. This paper argues that existing approaches are constrained by an overly individualistic conceptualization of peer difficulties. Drawing on developmental psychopathology, peer relations research, educational psychology, and social network theory, the paper proposes the Relational Ecology Framework (REF), a multi-level model that repositions peer rejection and social exclusion as emergent outcomes of interactions among individual vulnerabilities, friendship processes, classroom ecologies, teacher relationships, family systems, and school environments. A central argument is that friendship quality, rather than broad peer acceptance, constitutes a more developmentally meaningful indicator of social adaptation and a more productive intervention target. The framework introduces 'relational affordances', the opportunities a classroom structurally provides for meaningful peer connection, and 'relational engineering,' the deliberate redesign of classrooms, teacher practices, and family involvement to increase those opportunities. Six empirically testable propositions are outlined as a future research agenda. The paper concludes that meaningful advances in ADHD social intervention require a shift from teaching social skills to cultivating the relational ecologies within which belonging, connection, and developmental resilience can emerge.

Keywords: ADHD, social functioning, peer rejection, relational ecology, social inclusion.

1. Introduction

Attention-deficit/hyperactivity disorder (ADHD) is among the most prevalent neurodevelopmental conditions of childhood, affecting approximately 5–7% of school-age children globally and producing impairment across academic, behavioral, and social domains. Although clinical and educational attention has traditionally centered on inattention, hyperactivity, and impulsivity, a substantial body of evidence identifies social difficulties as among the most persistent and developmentally consequential features of the disorder. Children with ADHD experience significantly higher rates of peer rejection, lower social acceptance, fewer reciprocated friendships, and greater social isolation relative to typically developing peers (Gardner & Gerdes, 2015; Mikami, 2010; Ros & Graziano, 2017). These difficulties emerge rapidly, sometimes within the first days of peer-group exposure (Mrug et al., 2012), and frequently persist even when core ADHD symptoms improve.

The educational significance of persistent peer difficulties is substantial. Positive peer relationships support academic engagement, school belonging, self-esteem, and long-term adjustment, whereas chronic peer rejection predicts loneliness, depression, behavioral problems, and school disengagement. For children with ADHD, social impairment is not a secondary consequence of behavioral symptoms but a distinct domain of risk with independent developmental implications. Meta-analytic evidence confirms that social functioning deficits extend across peer status, friendship quality, social cognition, and interpersonal competence, making peer relationships a critical target for intervention in their own right (Parker et al., 2015; Rubin et al., 2015).

The dominant response to these challenges has been social skills training (SST), which seeks to remediate deficits in social knowledge and performance through direct instruction, modeling, rehearsal, and feedback. This model assumes that peer difficulties arise from deficiencies in social competence correctable through direct instruction and structured skill-building. It has shaped school-based, clinic-based, and community-based interventions internationally for more than four decades. Yet recent meta-analytic evidence reveals a troubling paradox: SST consistently produces measurable improvements in targeted skills while generating inconsistent effects on broader peer outcomes such as peer acceptance, friendship formation, and social inclusion, with randomized trials showing little to no transfer even when non-randomized studies suggest modest gains (Bussanich et al., 2025; Morris et al., 2021). This persistent gap between skill gains and social outcomes indicates that SST's core assumption—that peer difficulties stem from deficits in individual competence—misidentifies the mechanism producing exclusion.

We argue that social difficulties in ADHD reflect emergent properties of relational systems, not failures of individual competence. Drawing on developmental psychopathology, peer relations research, educational psychology, and ecological theory, we propose the Relational Ecology Framework (REF)—a multi-level model that situates peer rejection within the dynamic interplay among children's characteristics, friendship processes, classroom structures, teacher relationships, family systems, and institutional environments. The paper proceeds as follows: Section 2 reconceptualizes peer rejection as a relational–ecological process; Section 3 reframes friendship quality as the primary indicator of social success; Section 4 presents the REF and its component levels; Section 5 derives intervention implications through the concept of relational engineering; Section 6 outlines a six-proposition future research agenda; and Section 7 provides discussion and conclusions.

2. Peer Rejection as a Relational–Ecological Process

Traditional accounts of ADHD-related social difficulties locate their source within the individual child. Executive dysfunction, impulsivity, emotion dysregulation, and social cognitive impairments have all been identified as contributors to peer interaction difficulties, and this perspective has generated important advances in understanding the behavioral mechanisms underlying peer rejection. However, it cannot fully account for the persistence of social exclusion across contexts and over time, nor for the substantial variability in social outcomes among children with comparable symptom profiles. A growing body of evidence suggests that peer acceptance and rejection are better understood as emergent properties of complex social systems rather than direct consequences of individual deficits.

Ecological theory, particularly Bronfenbrenner's bioecological systems framework (Bronfenbrenner & Morris, 2007) provides a foundational rationale for this view: developmental outcomes arise from ongoing interactions between individuals and multiple nested environmental systems rather than from individual characteristics alone. Within educational settings, peer relationships are embedded within classroom ecologies that shape opportunities for interaction, inclusion, and exclusion. Consequently, social outcomes reflect not only what children do but also how peers interpret those actions, how teachers structure social opportunities, and how classroom norms regulate participation. From this perspective, social functioning is a relational achievement, produced through ongoing interactions among multiple actors and systems rather than an individual one.

A particularly consequential dynamic is the self-enforcing nature of peer reputation—the relatively stable, shared impression a peer group forms of a child based on past behavior, which subsequently shapes how that child's future behavior is interpreted regardless of whether the behavior itself has changed. Early social experiences contribute to reputations that subsequently filter how children's behaviors are evaluated by peers. Children initially perceived as disruptive or socially awkward attract negative expectations that persist even when the underlying behaviors diminish or change. Experimental studies demonstrate that children exhibiting ADHD-related behaviors are often evaluated negatively by peers within very short periods of initial contact, and these impressions rapidly constrain subsequent social opportunities and friendship access (Mrug et al., 2012). Established exclusion then limits access to the positive peer interactions necessary for reputation repair, creating self-reinforcing cycles of social marginalization that behavioral improvement alone may be structurally insufficient to break.

Social network research deepens this picture. Peer groups are not collections of independent dyadic relationships but interconnected networks with status hierarchies, influence patterns, and group norms. Children's social experiences depend not only on their direct interactions but on their structural position within these networks—their centrality, connectivity, and subgroup membership (Kindermann, 2007; Neal et al., 2017). Peer acceptance is therefore a collective social judgment shaped by network dynamics, not a simple product of individual behavior. Classrooms, moreover, vary substantially in the relational opportunities they structurally afford through seating arrangements, cooperative learning practices, behavioral management strategies, and teacher-mediated interaction patterns (Roseth et al., 2008). Teachers function as social architects whose expectations influence peer perceptions, whose practices distribute collaborative opportunities, and whose responses to behavioral difficulties either challenge or entrench reputational processes (Farmer et al., 2011; Gest & Rodkin, 2011). Family influences further extend the relational ecology: parents serve as social brokers who facilitate

friendship opportunities and support children in navigating interpersonal challenges (Mikami et al., 2010).

The critical implication is that interventions targeting only individual behavior leave unchanged the social structures, reputational dynamics, and relational ecologies that sustain exclusion; symptom reduction may improve behavioral functioning without altering friendship networks, classroom norms, or collective peer perceptions. This is not merely a quality-of-life concern: chronic peer rejection compounds over time into elevated risk for internalizing difficulties and academic disengagement (Parker et al., 2015; Wentzel et al., 2004), and for children with ADHD—who already carry elevated developmental risk—this compounding effect is especially consequential, foreclosing the social learning, emotional regulation practice, and identity formation that peer relationships normally provide.

3. Friendship Quality as the Primary Index of Social Success

Decades of ADHD social intervention research have used peer acceptance—assessed through sociometric status, peer nominations, or popularity ratings—as the primary outcome metric, reflecting an implicit assumption that successful social development is best indexed by a child’s degree of integration into the larger peer group. This assumption has constrained the field, directing attention toward social breadth at the expense of relational depth and optimizing interventions for an outcome that may not be the most developmentally meaningful.

Peer acceptance and friendship quality are conceptually and developmentally distinct constructs. Peer acceptance reflects a child’s standing within a collective social system—a group-level judgment about relative social preference. Friendship quality reflects the characteristics of specific dyadic relationships: reciprocity, trust, emotional support, companionship, and constructive conflict resolution. Although correlated, these constructs are not equivalent. A child may be broadly accepted yet lack emotionally meaningful relationships, while another may be socially marginalized yet possess one or two close, supportive friendships. These two social profiles carry substantially different developmental consequences and implicate different intervention priorities (Bagwell & Schmidt, 2011; Bukowski et al., 2018).

Research on children with ADHD consistently demonstrates that friendship quality functions as a significant protective factor, independent of broader peer status. Children with ADHD who maintain at least one high-quality friendship demonstrate better emotional adjustment, lower loneliness, higher self-esteem, and more positive long-term developmental outcomes (Mikami, 2010; Mrug et al., 2012). Critically, these benefits frequently persist even when broader peer difficulties remain, suggesting that friendship provides relational resources that can partially compensate for the absence of wider social acceptance. This pattern points toward what we term relational security as the more fundamental developmental resource for children navigating chronic social adversity.

Relational security refers to the experience of being known, valued, and accepted within a stable interpersonal relationship. The construct is related to, but distinct from, attachment security: whereas attachment security concerns the caregiver-child bond, relational security as used here applies specifically to peer friendship in middle childhood and adolescence, and is proposed to capture the protective function that a single high-quality friendship can serve independent of broader peer status. Unlike peer acceptance, which depends on collective evaluations that can fluctuate across contexts and time, relational security emerges from repeated experiences of trust, reciprocity, emotional responsiveness, and mutual recognition within a specific dyadic relationship. Friendships provide emotional co-regulation, opportunities for identity exploration, protection from social threat, and access to social learning within trusted

relationships (Bagwell & Schmidt, 2011; Bukowski et al., 2018)—functions of particular developmental importance for children with ADHD, who frequently encounter criticism, correction, and social failure across multiple settings. The child who possesses even one such relationship has access to a relational context in which adversity can be interpreted, buffered, and recovered from; the child without such resources must navigate social exclusion in relative isolation. In this sense, friendship may operate not merely as a correlate of positive adjustment but as an active mechanism of resilience (Parker et al., 2015; Wentzel et al., 2004).

This reconceptualization has direct implications for intervention. Most SST programs assume that accumulating positive peer interactions will eventually yield meaningful relationships; but friendship formation requires sustained interaction, reciprocity, and the gradual development of trust, not merely repeated successful exchanges. Interventions optimized for peer acceptance may therefore target a downstream indicator rather than the relational processes through which developmental adaptation actually occurs. Shifting the primary outcome target from peer acceptance to friendship quality is thus a reorientation of what the field considers social success in ADHD, not merely a methodological adjustment—and it does not lower expectations for these children: a child with meaningful, reciprocal friendships is not socially deficient simply because they are not universally popular. This has a direct implication for schools specifically serving children with ADHD: because relational security is both harder for these children to achieve and more consequential when present, academic performance metrics alone are an incomplete measure of whether a school is meeting their needs.

4. The Relational Ecology Framework

Building on the preceding arguments, we propose the Relational Ecology Framework (REF)—a multi-level model that explains how interactions among individual, interpersonal, classroom, family, and institutional systems shape pathways toward social inclusion or social exclusion. The framework's central proposition is that social difficulties in ADHD emerge not simply because children possess behavioral or social vulnerabilities, but because those vulnerabilities interact with relational ecologies that either amplify or attenuate their effects. Identical behavioral characteristics may therefore produce markedly different social outcomes depending on the relational resources distributed across a child's ecological contexts. This proposition explains why children with similar ADHD profiles follow divergent social trajectories and why behavioral improvement does not reliably translate into social inclusion.

The Relational Ecology Framework (REF)

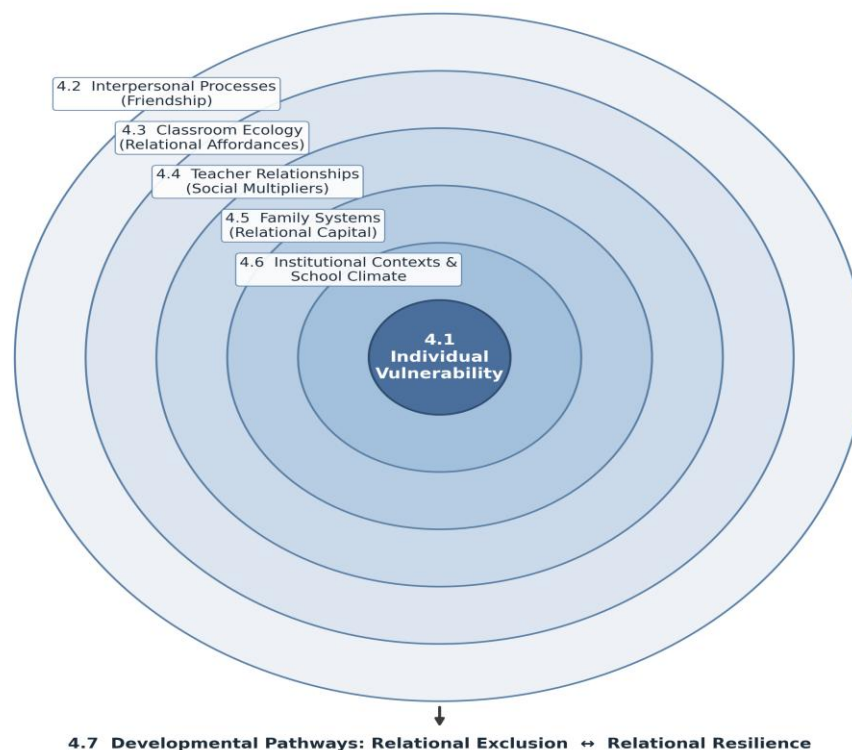


Figure 1. The Relational Ecology Framework (REF). Peer outcomes for children with ADHD are shaped by nested, mutually influencing levels—individual vulnerability (4.1), interpersonal friendship processes (4.2), classroom ecology (4.3), teacher relationships (4.4), family systems (4.5), and institutional context (4.6)—which jointly shape developmental pathways toward relational exclusion or relational resilience (4.7).

4.1 Individual-Level Processes: Social Vulnerability as Developmental Risk

At the individual level, children with ADHD frequently experience difficulties with impulsivity, executive dysfunction, emotional dysregulation, attentional variability, and social cognition. The REF reconceptualizes these characteristics as sources of social vulnerability rather than direct determinants of peer rejection. Vulnerabilities increase the probability of negative social experiences, but their developmental consequences depend on how peers, teachers, families, and institutions respond to them—a distinction that shifts theoretical attention from deficits alone to the contexts in which deficits acquire social meaning and developmental significance.

4.2 Interpersonal Processes: Friendship as a Relational Buffer

Friendships occupy a unique position within the REF as the most immediate source of relational security available to children in educational settings. The framework proposes that high-quality friendships function as relational buffers, interrupting pathways from social vulnerability to social exclusion by providing emotional validation, opportunities for social learning, protection against victimization, and contexts in which social mistakes can be repaired rather than permanently recorded in peer reputations. Critically, the buffering effects of friendship are hypothesized to be nonlinear: the developmental value of one high-quality friendship may substantially exceed that of multiple superficial peer connections, directly challenging intervention models that prioritize interaction quantity over relationship quality.

4.3 Classroom Ecology: Relational Affordances and Social Architecture

The classroom is the primary social ecology in which peer relationships develop. The REF positions classrooms not merely as settings for interaction but as social architectures that actively shape relational opportunities. The framework introduces the construct of relational affordances to describe the extent to which classroom environments provide opportunities for meaningful interpersonal connection. The construct itself has not been directly measured as a unified index, but it synthesizes an existing empirical base showing that teacher practices and classroom structural features shape children's peer-interaction opportunities and peer-ecology formation (Farmer et al., 2011; Gest & Rodkin, 2011); the contribution here is to organize these findings under a single construct usable for intervention design, not to claim they have been validated as a composite measure. Classrooms rich in relational affordances—through cooperative learning, flexible grouping, collaborative projects, and structured peer engagement—create repeated opportunities for reciprocity and friendship formation. Classrooms low in such affordances may inadvertently reinforce social fragmentation and prevent the development of the sustained interactions necessary for friendship. This construct helps explain why identical behavioral interventions produce different peer outcomes across settings: behavioral change is insufficient when the relational affordances of the environment remain limited.

4.4 Teacher Relationships as Social Multipliers

Within the REF, teachers function as social multipliers whose actions affect not only individual students but the broader relational ecology of the classroom. Teacher expectations influence peer perceptions, classroom norms, and access to collaborative learning. Supportive teacher-student relationships are associated with more positive peer views and greater social inclusion (Farmer et al., 2011; Hamre & Pianta, 2001). Conversely, repeated public correction or deficit-oriented framing may inadvertently reinforce stigmatized peer reputations. The framework proposes two pathways through which teacher relationships influence peer outcomes: directly, through effects on student engagement and adjustment; and indirectly, through effects on how peers perceive and interact with targeted students and how social norms are established within the classroom.

4.5 Family Systems as Generators of Relational Capital

Relational ecologies extend beyond school contexts. Families contribute to social development through friendship coaching, emotional support, social modeling, and the creation of peer interaction opportunities outside school hours. Parents serve as social brokers who facilitate playdates, maintain inter-family communication, and support children in navigating interpersonal challenges (Mikami et al., 2010). The REF conceptualizes families as generators of relational capital—social resources available through supportive relationships and connections that extend children's relational opportunities beyond the classroom and strengthen the conditions necessary for friendship development and maintenance. This use adapts Bourdieu's (1986) concept of social capital—resources accessible through durable networks of relationships—applying it specifically to the family-mediated relational resources available to children with ADHD.

4.6 Institutional Contexts and School Climate

At the broadest ecological level, school climate and institutional practices establish conditions within which all other relational processes occur. Inclusive school cultures, anti-bullying policies, collaborative learning philosophies, and social-emotional learning initiatives shape how differences are perceived and accommodated across the school community. The REF

proposes that institutional contexts regulate the flow of relational resources throughout the educational system: schools characterized by psychological safety and a culture of belonging support positive peer relationships, while those lacking such characteristics risk systematically transforming individual social vulnerabilities into entrenched patterns of social exclusion.

4.7 Developmental Pathways: Relational Exclusion and Relational Resilience

The REF's most distinctive contribution is its emphasis on developmental pathways rather than isolated risk or protective factors. The framework proposes two competing trajectories. The relational exclusion pathway occurs when social vulnerabilities interact with limited relational resources across ecological systems: peer rejection becomes reinforced through negative reputations, restricted friendship opportunities, inadequate teacher support, and weak institutional protections, progressively increasing risk for loneliness, disengagement, and psychological distress. The relational resilience pathway occurs when vulnerabilities are buffered by supportive relationships across multiple ecological levels: high-quality friendships, positive teacher relationships, engaged families, and inclusive school environments collectively reduce the developmental impact of social difficulties and expand opportunities for adaptive trajectories. Crucially, resilience in this model does not require the elimination of social vulnerabilities but rather the availability of sufficient relational resources across the ecology to offset their developmental consequences.

5. Implications for Intervention: From Skill Acquisition to Relational Engineering

The REF reframes the central task of social intervention in ADHD. If peer difficulties emerge from interactions among multiple relational systems, then interventions targeting only individual behavior are structurally misaligned: they improve social performance while leaving unchanged the ecological conditions that produce and sustain exclusion. The framework does not call for the abandonment of social skills instruction; social competencies remain important developmental resources that influence children's capacity to initiate, maintain, and repair relationships. Rather, it challenges the assumption that competence alone generates inclusion, and proposes that intervention effectiveness depends critically on whether educational environments provide opportunities for meaningful relationships to develop and persist. This reframing points toward what we term relational engineering: the intentional redesign of educational environments to increase the likelihood that supportive, reciprocal, and enduring relationships emerge among students. Relational engineering shifts the primary unit of intervention from the individual child to the social system, targeting classroom structures, teacher practices, family engagement, and institutional climate alongside individual competencies.

In practice, this reorientation entails five interconnected priorities:

- i. Friendship formation must be repositioned as a primary rather than secondary intervention objective. Programs should be evaluated not only by changes in peer acceptance or observed social skills but by friendship quality, reciprocity, stability, and perceived support—outcomes that more directly reflect the relational resources associated with developmental resilience (Bagwell & Schmidt, 2011).
- ii. Classrooms must be deliberately designed for relational opportunity. Cooperative learning structures, peer mentoring arrangements, flexible grouping, and sustained collaborative projects create conditions under which reciprocal relationships can form and be maintained over time. Frequent social contact without relational depth is insufficient; educational environments must provide repeated opportunities for shared

- goals, mutual dependence, and sustained positive engagement that allow trust to develop (Gest & Rodkin, 2011).
- iii. Teachers must be prepared as architects of relational ecology rather than simply as implementers of behavioral management programs. Professional development should encompass training in friendship facilitation, peer-group dynamics, inclusive classroom design, and the early identification of students experiencing relational vulnerability before exclusion cycles become entrenched (Farmer et al., 2011). School and educational psychologists are particularly well positioned to lead this work, since their existing role already bridges individual assessment, classroom consultation, and family engagement.
 - iv. Family-school partnerships must be strengthened as components of the relational infrastructure that sustains children's social development. Rather than viewing parents primarily as intervention supporters, schools should recognize families as generators of relational capital whose active involvement in facilitating peer interactions outside school hours significantly extends the relational resources available to children (Mikami, 2015).
 - v. Intervention evaluation must be expanded to encompass relational quality, friendship stability, peer-network integration, classroom belonging, and relational security alongside traditional social performance indicators, which currently dominate outcome measurement despite capturing a relatively distal set of social processes (Parker et al., 2015).

Multi-level programs simultaneously targeting individual competencies, friendship opportunities, classroom structures, teacher practices, and family supports are predicted by the REF to substantially outperform skill-focused approaches, precisely because they align intervention targets with the full ecological reality of children's social lives. Social inclusion, reconceived in this way, is not an individual achievement but a collective responsibility of educational communities and the systems that support them.

An illustrative example clarifies what relational engineering might look like in practice. Consider a school adopting a relational-ecological approach to ADHD social intervention. Rather than enrolling a child with ADHD in a pull-out social skills group, the intervention team first assesses the relational affordances of the child's classroom: How frequently do students engage in cooperative activities? Are there identifiable peers with compatible interests? Does the teacher respond to behavioral difficulties in ways that protect or erode the child's peer reputation? Armed with this ecological assessment, the team might recommend restructuring seating arrangements to facilitate interaction with compatible peers, designing a collaborative project that creates repeated opportunities for shared success, coaching the teacher on how to publicly affirm the child's contributions in ways that shift peer perceptions, and working with parents to arrange informal peer activities outside school hours. Social skills instruction may still be incorporated, but it is embedded within a broader strategy aimed at changing the relational landscape rather than simply improving individual performance within an unchanged ecology. This example is hypothetical, but it illustrates the central shift the REF recommends: from a focus on what the child does to a focus on what the environment makes possible.

Existing programs move in this direction: Mikami's MOSAIC program, a randomized trial with 34 general education teachers and 558 children, trained teachers in behavior-management and peer-inclusion strategies (Mikami et al., 2022). Its findings illustrate both the promise and the limits of current best practice. Whole-class teacher ratings of social and academic competence improved in MOSAIC classrooms relative to control classrooms, and target children with elevated ADHD symptoms perceived greater teacher support. However,

MOSAIC produced no main effect on peer sociometric ratings, and target children in MOSAIC classrooms were rated less favorably by peers than target children in control classrooms—despite the teacher-level gains. This pattern is consistent with the REF’s central claim: intervening on teacher practice and individual behavior can shift adult-reported outcomes without shifting the peer-level relational ecology, because classroom relational affordances and peer-network position were not themselves direct intervention targets. The framework points toward a next generation of studies that do precisely this, testing whether systematic modification of the relational ecology produces gains in friendship quality and peer-network position that exceed those achieved by current best-practice programs.

6. Future Research Agenda

The REF generates six empirically testable propositions that collectively define a research agenda for a relational science of social inclusion in ADHD.

Proposition 1: Friendship quality will predict long-term psychological and educational adjustment more strongly than peer acceptance among children with ADHD. Longitudinal research is needed to determine whether friendship quality mediates, rather than merely accompanies, positive developmental outcomes, and whether the presence of even a single high-quality friendship is sufficient to produce measurable resilience in the context of broader peer rejection.

Proposition 2: Relational resources will moderate the association between ADHD symptom severity and social outcomes, such that supportive friendships, positive teacher relationships, engaged families, and inclusive classroom climates attenuate social risks independently of symptom level. This would demonstrate that social vulnerability is contextually bounded, not symptomatically determined. Design: cross-sectional or longitudinal moderation analysis, with relational resources and symptom severity entered as independent predictors.

Proposition 3: Classroom relational affordances will predict social inclusion independently of individual student characteristics. Students with similar ADHD profiles should experience substantially different social trajectories depending on the relational opportunities available in their particular classrooms, a finding that would implicate classroom design as a modifiable determinant of social outcomes. Design: multi-classroom comparison study, statistically controlling for individual student characteristics.

Proposition 4: Teacher–student relationships will influence peer outcomes through indirect pathways—shaping peer perceptions and classroom social dynamics—to a degree that exceeds effects captured by examining direct influences on individual student adjustment alone. Mediation models are needed to test these indirect processes.

Proposition 5: Changes in social network position will explain intervention outcomes more completely than measurable skill gains, suggesting that social network analysis—an established method in general peer-relations research (Bukowski et al., 2018) but rarely applied to ADHD intervention outcomes—should become a standard methodological component of future studies. Design: social network analysis, pre/post intervention.

Proposition 6: The durability of multi-level intervention effects will depend specifically on whether gains are embedded in altered relational structures—friendship networks, classroom norms—rather than in individual skill level: effects produced primarily through skill-only components should decay once direct instruction ends, whereas effects embedded in relational structures should persist after active intervention withdrawal. Design: follow-up assessment at 6–12 months post-intervention, comparing skill-only, single-component, and multi-level conditions.

Testing these propositions will require methods that go beyond the design's standard in current ADHD social-functioning research. Longitudinal designs are needed to examine developmental trajectories over meaningful time periods; social network analysis to track how peer relationships evolve and how students become integrated into or excluded from social groups; experience sampling methods to capture everyday experiences of belonging and exclusion in ecological time; and mixed-methods approaches to illuminate how relational processes are understood from the perspectives of students, teachers, and families.

Critically, future research must extend beyond North American and Western educational contexts to examine how cultural variation in friendship norms, peer-group organization, teacher authority, and institutional inclusion practices may moderate the propositions advanced here.

7. Conclusion

The Relational Ecology Framework (REF) reconceptualizes social difficulties in childhood ADHD as emergent outcomes of interacting relational systems, friendship networks, classroom structures, teacher practices, family systems, and institutional context, rather than as failures of individual competence. This shift explains why behavioral improvement alone does not reliably produce social inclusion: reputational dynamics, network position, and ecological conditions exert independent, cumulative influence on developmental trajectories.

By elevating friendship quality and relational security alongside peer acceptance, the REF redirects intervention toward outcomes closer to how developmental resilience is actually built. Practically, this reframes intervention as coordinated relational restructuring, adjusting classroom interaction patterns, teacher practice, and family engagement together, rather than teaching skills in isolation, and it reframes social inclusion itself as a measurable educational outcome rather than a byproduct of behavioral compliance.

8. Limitations

Despite its contribution, the REF has several limitations. First, it remains a theoretical framework without empirical validation, requiring longitudinal and intervention-based studies to test its explanatory and predictive utility. Second, it is grounded primarily in Western developmental literature, which may limit its applicability across culturally diverse educational systems with different relational norms and institutional structures. Third, the framework does not yet fully incorporate resource-constrained educational contexts, where large class sizes, limited specialist support, and infrastructural constraints may significantly shape relational dynamics. These limitations underscore the need for cross-cultural and context-sensitive validation before broad implementation.

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