Cultural norms, digital infrastructures, and institutional trust: Rethinking bullying governance in UAE schools

Karima Almazroui

Mohamed Bin Zayed University for Humanities, Abu Dhabi, United Arab Emirates.

(*Email: k.almazroui@mbzuh.ac.ae*)

Abstract

Bullying in the United Arab Emirates (UAE) is not an isolated breach of student conduct but a structural outcome of governance logics embedded in digital infrastructures and honor-based social norms. This study reconceptualizes cyberbullying as an extension of institutional hierarchies and cultural authority, rather than a discrete online phenomenon. Employing a convergent parallel mixed-methods design, it integrates survey data from 3,482 students, 84 in-depth interviews across 53 schools, and natural language processing (NLP) analysis of adolescent discourse. Findings show that institutional trust, operationalized through perceived fairness, confidentiality, and responsiveness, is the most significant predictor of whether students disclose harm. Female students and victims of social exclusion exhibit the lowest trust levels, constrained by reputational risk and family honor codes. The study advances two original contributions: the Cultural Calculus Model, which frames disclosure as a culturally mediated decision-making process, and the Majlis Trust Model, an AI-assisted, restorative governance framework aligned with the UAE's Wellbeing Strategy 2031. By positioning trust as a precondition for adolescent safety, the research offers a culturally grounded and digitally ethical blueprint for addressing bullying in hierarchical, collectivist school systems worldwide.

Keywords: Cultural Norms, Cyberbullying, Digital Governance, Institutional Trust, Restorative Practices.

1. Introduction

Bullying remains a significant threat to student well-being, academic engagement, and the integrity of school communities. Defined as repetitive, intentional harm by peers through physical, verbal, emotional, or digital means, it affects an estimated one in three students worldwide [1] and can lead to depression, disengagement, social withdrawal, and suicidal ideation [2]. Countries such as Finland, Australia, and South Korea have implemented national strategies to address bullying. Finland's *KiVa* program integrates peer engagement, teacher training, and school-wide protocols,

reducing prevalence significantly [3]. South Korea uses AI to detect emotional distress, while Australia embeds digital citizenship in its curriculum to curb cyberbullying [1].

However, such models rest on socio-cultural assumptions, high procedural trust, individual agency, and legalistic disclosure norms, that contrast sharply with collectivist, honor-based contexts. In the UAE, education is rapidly modernizing but remains shaped by norms where silence, reputation, and deference influence adolescent behavior. Despite initiatives like National Bullying Prevention Week and the inclusion of moral education [4] responses remain largely awareness-based and moralistic, lacking culturally adapted, data-driven frameworks. The Arab Youth Center [5] reports that 38% of regional students have experienced bullying, yet institutional interventions, especially for cyberbullying, remain limited, often obscured by adult misperceptions and privacy norms [6].

Existing UAE research is growing but fragmented. Studies highlight underreporting of emotional and digital bullying, especially among girls [7] yet few connect these behaviors to the broader institutional and cultural ecologies in which they occur. Cultural constructs, ʿird (family honor), muruʾa (moral standing), gender roles, and administrative opacity, may influence both the occurrence of bullying and the likelihood of disclosure. The role of digital tools, particularly AI, in ethically detecting and addressing these issues remains underexplored.

This study adopts an integrated socio-technological approach, reconceptualizing bullying as a structural phenomenon shaped by digital communication, institutional design, and socio-cultural logic. Rather than viewing cyberbullying as an isolated subtype, it is positioned as an extension of entrenched power asymmetries, reproduced in school governance and online spaces. Drawing on Bronfenbrenner's ecological systems theory and technosocial behavior models [8] the study builds a conceptual foundation that frames bullying as both a behavioral and governance issue, mediated by trust, honor norms, and technology.

The findings aim to inform scalable, culturally responsive interventions, contributing to literature on adolescent violence, digital behavior, and institutional trust in non-Western contexts. This work addresses a national policy priority in the UAE's Wellbeing Strategy 2031 and a global challenge: how can schools in collectivist, high-power-distance societies build systems that not only demand trust, but earn it?

1.1. Research Objectives
1. Examine the prevalence and typologies of bullying, physical, verbal, emotional, and cyber, across UAE schools.
2. Analyze how socio-cultural norms, including family honor, gender expectations, and institutional hierarchies, shape the occurrence, interpretation, and concealment of bullying.
3. Assess the awareness, attitudes, and responses of parents and educators toward digital aggression, identifying perceptual gaps and institutional blind spots.
4. Explore the ethical and operational feasibility of AI-enabled early detection tailored to the UAE's cultural and educational context.
5. Develop scalable, culturally responsive policy recommendations positioning institutional trust as a foundation for school safety.

1.2. Research Questions
1. What forms of bullying are most prevalent in UAE schools, and how do patterns vary across domains?
2. How do cultural constructs, ʿird, muruʾa, gender norms, influence students' willingness to disclose or remain silent?
3. How prepared are parents and educators to identify, interpret, and respond to cyberbullying and other non-physical harm?
4. How can AI and NLP tools be ethically integrated into school systems for early detection and culturally attuned intervention?

2. Literature Review
Over the past two decades, global scholarship on school bullying has expanded, yet much remains grounded in Western paradigms emphasizing individual behavior, psychological outcomes, and generic policy responses. In culturally specific contexts like the United Arab Emirates (UAE), such approaches often overlook the interplay of digital infrastructures, institutional governance, and honor-based norms that shape how bullying is experienced, reported, and addressed. This review integrates interdisciplinary research to frame bullying as both a social and technological construct, with emphasis on its cultural inflections in Arab educational settings.

2.1. Bullying as a Socio-Technological and Cultural Phenomenon
Over the past two decades, bullying has shifted from being understood as a behavioural problem to a multidimensional phenomenon shaped by economic stratification, digital connectivity, institutional design, and cultural authority structures [2, 9]. According to UNESCO [10] one in three students globally experience bullying, with cyberbullying increasing rapidly because it is not constrained by physical boundaries. In the United Arab Emirates (UAE), high internet penetration, evolving youth culture, and enduring traditions interact in ways that often discourage the public expression of vulnerability [5, 6].

Recent studies in the UAE reveal the layered nature of adolescent violence. Almazroui and Al Kaabi [7] found that while physical bullying, particularly among boys, remains visible, emotional and cyberbullying are more often underreported and poorly understood by adults. Online aggression tends to reproduce existing social hierarchies, while

anonymity reduces opportunities for intervention. In this setting, cultural silence can function both as a form of resilience and as a conduit for prolonged harm.

Global theoretical frameworks help contextualize these dynamics. Bronfenbrenner [11] ecological systems theory situates behavior within nested environments that, in the UAE, are shaped by muru'a (honor), hierarchical respect, and gendered expectations. These factors complicate both disclosure and intervention [12, 13]. Girls in particular face higher reputational stakes, often choosing silence to avoid social repercussions. Livingstone and Third [8] techno-social environments framework, which views online and offline identities as interconnected, frames cyberbullying as an amplification of structural imbalances. In elite UAE schools, where institutional hierarchies mirror broader societal ones, digital shaming and exclusion are pervasive yet often invisible to adults.

Despite these insights, significant gaps remain. Cultural norms and digital infrastructures are frequently examined in isolation, leaving their intersection, and its role in sustaining institutional silence, underexplored. Few models trace the evolution of school trust in response to administrative action or neglect. As Scully, et al. [14] observe, trust is an adaptive response to perceived fairness, neglect, or complicity on the part of institutions.

This study addresses these gaps by examining how institutional trust, cultural silence, and digital behavior interact to shape bullying experiences and reporting in the UAE. It also explores how artificial intelligence can be ethically deployed for culturally sensitive prevention, using real-time monitoring and alert systems [15, 16]. By shifting from behaviorist to governance-centered frameworks, the study reconceptualizes school safety in hierarchical, honor-based societies where credibility is grounded in moral rather than procedural legitimacy.

2.2. Cyberbullying and the Digitalization of Aggression

Cyberbullying, encompassing harassment, exclusion, impersonation, doxxing, and non-consensual content sharing, has emerged as one of the most pervasive yet least understood forms of adolescent violence [17]. Operating across multiple platforms, often outside adult oversight, it is asynchronous, anonymous, and persistent, which amplifies its psychological impact. Victims frequently experience anxiety, social withdrawal, depression, and suicidal ideation [8, 18].

Globally, the scale is significant. In South Korea, 42 percent of adolescents reported harassment during COVID-19 lockdowns [19]. Studies in Nigeria link mobile device access to online aggression among urban students [20] indicating not only the role of technological availability but also the absence of integrated digital citizenship in school governance.

The UAE mirrors these patterns but through a distinct socio-cultural lens. By the age of 13, 89 percent of Emirati youth are active on social media [21] yet digital literacy is applied inconsistently. Underreporting is reinforced by a generational gap: more than 60 percent of parents view online activity as harmless, while students describe such aggression as relentless, public, and isolating [7]. This gap is cultural as well as cognitive, since emotional restraint is valorized and ʿird (family honor) can be jeopardized by disclosure. Boys may view speaking out as weakness, while girls risk exclusion for acknowledging harassment [13]. In such contexts, silence becomes both a protective measure and a demonstration of loyalty.

Emerging artificial intelligence tools present new possibilities for intervention. Projects such as Cyberbullying.AI [22] and large language model applications in Japan and the UAE use natural language processing to detect harmful discourse and enable early action [19, 23]. However, scholars caution that in low-trust environments, detection systems must be culturally embedded and transparent to avoid reinforcing punitive surveillance [24, 25].

In the UAE, current responses remain fragmented. Moral education curricula and annual campaigns, while well-intentioned, often serve symbolic rather than structural purposes. Adopting Western frameworks without adaptation to local trust dynamics produces uneven results [26]. This study argues that cyberbullying in this context is not a technological anomaly but a culturally saturated, digitally mediated phenomenon. Addressing it requires restorative strategies grounded in relational justice, dialogue that is sensitive to honor norms, and AI systems governed by principles of trust rather than control.

2.3. Socio-Cultural Norms and the Arab Schooling Context

In the Arab world, schools function not only as sites of instruction but also as moral and cultural gatekeepers. In the UAE, as in other Gulf societies, education is embedded within family hierarchy, honour-based morality, and deference to authority, all of which shape how bullying is perceived, interpreted, and addressed. While international frameworks often prioritise psychological safety and student agency, local norms place greater emphasis on social cohesion, discretion, and the preservation of familial reputation [9, 12].

The OECD [27] identifies leadership, peer empowerment, and staff training as critical predictors of anti-bullying effectiveness. Internationally recognised programmes such as Finland's KiVa and Australia's eSafety curricula embed intervention into governance structures [3, 28]. However, in Arab contexts these models frequently fail without cultural recalibration. Policy transfer risks producing symbolic compliance rather than transformative change [26]. Frameworks that assume Western norms of disclosure and self-advocacy may alienate students who navigate different social logics.

In the UAE, despite initiatives such as the National Moral Education Program and Anti-Bullying Week, structural gaps remain. UNICEF UAE [29] reported that only 37 percent of teachers are trained to recognize and respond to cyberbullying, with even less confidence in addressing emotional abuse or digital harassment. In more conservative communities, educators often fear parental backlash, which reinforces institutional silence.

Cultural taboos relating to gender, shame, and exposure deepen this silence. The concept of ʿird (family honor) extends beyond the individual, influencing both the willingness of children to disclose and the manner in which adults respond. Boys may associate vulnerability with dishonor, while girls risk reputational damage if they report emotional or sexual

harassment. Mahfouz [12] notes that Emirati girls in co-educational or international schools are particularly affected, often choosing silence as both a protective strategy and a cultural obligation.

Barakat [13] observes that schools often mirror patriarchal hierarchies in which student voices are minimized and bullying can be rationalized as discipline or a rite of passage. Such interpretations weaken ethical governance and normalize harm. Nonetheless, culturally adapted reforms are possible. In Singapore, digital wellbeing initiatives have been successful by grounding interventions in communal trust and moral responsibility [30]. In Oman, restorative justice circles led by community elders reframed discipline as a process of communal repair, reducing incidents [31].

These examples suggest that effective anti-bullying strategies in the Arab world must move beyond moral exhortation to implement culturally anchored institutional reforms. Interventions must align with the honor-based social fabric while also addressing the digital realities of adolescent life. This study responds to this need by proposing trust-centered, contextually grounded mechanisms for prevention and response.

2.4. Educational Benchmarks and Global Policy Practices

Comparative research shows broad consensus on effective systemic responses to bullying. In high-performing school systems, prevention is integrated into core governance rather than treated as a disciplinary add-on. Finland's KiVa and Australia's eSafety framework demonstrate that sustained reductions require multi-level strategies involving students, teachers, parents, and digital platforms [3, 28].

KiVa, grounded in ecological and social learning theories, has reduced reported bullying by up to 40 percent through universal lessons, targeted protocols, and structured teacher training [32]. In Australia, the eSafety Commissioner coordinates curriculum integration, parent engagement, and AI-assisted reporting to detect online abuse early [33]. These models emphasize proactivity, confidentiality, and collaboration, yet require cultural adaptation before transfer.

In the UAE and wider Arab world, reforms are emerging but uneven. While initiatives such as Anti-Bullying Week and the National Strategy for Wellbeing 2031 signal intent, UNICEF UAE [29] and TDRA [21] report persistent protocol gaps, particularly for digital harm. The Moral Education Programme promotes empathy and resilience but lacks the enforcement and monitoring mechanisms found in KiVa or Singapore's Trust Framework. Without clear recourse and data-driven oversight, such curricula risk becoming symbolic.

This study adapts global best practices into a culturally congruent model, combining majlis-based mediation, AI-assisted discourse analysis, and trust-centred audits to align modern governance tools with local moral economies.

2.5. Parental Perceptions and Institutional Blind Spots

Research consistently shows a gap between adolescents' experiences of bullying and adults' perceptions of its severity. Teachers and parents often underestimate emotional and digital harm, especially without physical evidence [34, 35]. This gap persists in contexts where family reputation and social harmony outweigh individual expression.

In the UAE, 60 percent of parents surveyed by Almazroui and Al Kaabi [7] believed digital conflicts would "resolve themselves," viewing them as transient peer disputes rather than sustained abuse. Adolescents, particularly girls, described such aggression as enduring, humiliating, and isolating. This mismatch delays reporting, perpetuates administrative inaction, and deepens disengagement.

Educators face similar challenges. Many are trained to address physical confrontation but lack skills and protocols for detecting emotional manipulation, exclusion, or online harassment, particularly when intersecting with family sensitivities or gender norms. UNICEF UAE [29] found fewer than half felt confident intervening in cyberbullying cases, citing fear of parental backlash, unclear policies, and insufficient training.

These blind spots are culturally embedded. In Emirati and wider Arab contexts, *sitr* (privacy) and *'ird* (honor) shape how families interpret disclosures. Students face a double bind: remain silent or risk family disapproval. This disproportionately silences female students [9, 12].

Emerging AI tools may help bridge these divides. NLP-based monitoring can flag emotionally charged language, prompting early intervention without requiring self-disclosure [15]. Severity-ranking algorithms can distinguish minor conflict from high-risk harassment [16]. When embedded in culturally attuned frameworks, such tools can enhance both efficiency and legitimacy. However, as Lee and Park [19] note, algorithmic detection must be paired with relational understanding to ensure equity, consent, and ethical oversight.

Institutional blind spots should be understood as governance failures arising from misaligned cultural, technological, and pedagogical systems. This study responds by integrating AI-assisted detection with honor-sensitive restorative practices, enabling schools to act as vigilant and trusted actors.

2.6. Theoretical Foundation and Research Gap

This study draws on Bronfenbrenner's ecological systems theory, which situates adolescent behavior within nested environments from family and school to cultural, media, and policy contexts [11]. In this framing, bullying is a governance failure shaped by interdependent institutional, cultural, and digital systems.

To address the digitally mediated dimensions of adolescent life, the analysis incorporates Livingstone and Third [8] techno-social theory (2017), which treats online environments as co-constructors of identity, risk, and agency. In the UAE's collectivist moral order, adolescents navigate surveilled digital spaces where harm reverberates through familial reputation, gender norms, and communal hierarchies.

Global frameworks rarely account for the honor-based logic influencing disclosure in Arab societies. To address this, the study introduces the Cultural Calculus Model, grounded in *'ird* (family honor), *sitr* (dignified concealment), and

muru'a (moral standing). Here, silence is an active form of social protection, negotiated within constraints of obedience, shame avoidance, and risk management. Disclosure becomes a culturally conditioned decision with reputational consequences, explaining why interventions premised on open reporting often falter in Gulf schools.

Institutional Betrayal Theory [36] further illuminates how neglect or retaliation erodes trust. In this context, inaction is perceived not as procedural failure but moral complicity, reinforcing opacity and impunity.

While prior studies have examined digital bullying, honor norms, and trust separately, this is the first to integrate them into a mixed-methods framework for the UAE. An AI-augmented discourse analysis, using culturally adapted NLP tools, is employed to examine how students' express vulnerability, shame, and disappointment online. The Cultural Calculus Model extends techno-social theory by showing how adolescents weigh the moral cost of online expression. In high-context societies, anonymity may heighten rather than reduce reputational fears by detaching visibility from accountability.

This multi-theoretical architecture moves beyond descriptive mapping to propose a culturally intelligent framework for intervention design, AI tool development, and trust-centered policy. It underpins the Majlis Trust Model, which can be scaled across the Gulf and other hierarchical education systems facing similar socio-technological challenges.

3.Methodology

Understanding bullying through the lens of institutional trust in the UAE required a design capturing behavioral patterns, governance structures, and socio-cultural dynamics. This study used a convergent parallel mixed-methods framework, integrating quantitative generalizability with qualitative depth. Guided by ecological systems theory [11] technosocial theory [8] and a culturally adaptive lens, the approach was both rigorous and context-sensitive. Ethical and AI-related considerations followed UNESCO's AI in Education guidelines and UAE national protocols.

3.1. Research Design

A convergent parallel mixed-methods design, situated in a pragmatic paradigm Creswell and Plano Clark [37] collected quantitative and qualitative data simultaneously, analyzing them separately before integration. This ensured triangulation, enabling statistical analysis alongside culturally nuanced interpretation. A 60:40 weighting favored the quantitative strand for policy relevance, while qualitative findings were critical to unpacking cultural silences, shame-based non-disclosure, and trust dynamics.

The Mixed Methods Appraisal Tool Hong, et al. [38] was applied to ensure conceptual coherence and reduce mono-method bias. Quantitatively, a correlational-comparative strategy examined trust differentials across bullying roles and institutional types. Qualitatively, interviews explored how *'ird* (honor) and *muru'a* (moral standing) shaped trust, disclosure, and perceptions of authority. Integration used a joint display matrix aligning statistical trends with coded narratives.
A planned longitudinal extension will trace trust trajectories post-intervention to assess causal mechanisms more fully.

3.2. Participants and Sampling

The study targeted students aged 12–18 across all seven Emirates. From outreach to 78 schools, 53 participated, representing public (32%), private (51%), and international (17%) institutions. Stratified random sampling balanced curriculum types (MOE, British, American, IB) and demographics. The quantitative sample comprised 3,482 respondents, exceeding power thresholds for HLM and multivariate analyses [39]. The qualitative sample included 84 semi-structured interviewees, purposively selected for diversity in school type, gender, and bullying role.

Participation was voluntary under UAE National Research Ethics Committee approval (Ref: EDU-23-UB). Parental consent and student assent were secured. Non-response analysis revealed no significant demographic skew (t = 1.21, p = .23; χ^2 = 3.42, p = .18). Interviews were gender-matched, conducted in private settings, and led by facilitators trained in youth engagement and ethical communication. External intercoder audits minimized interpretive bias.

Students in homeschooling or specialized education centers were excluded due to access constraints, though collaboration with the Dubai Autism Center is underway to pilot inclusive tools for neurodivergent and homeschooled learners in future research cycles.

3.3. Instruments and Measures
Quantitative   Instruments
Three validated tools measured institutional trust, bullying exposure, and bystander engagement:
- School Trust Scale (STS): Adapted from international frameworks and translated into Arabic, assessing administrative competence (α = .88), benevolence (α = .85), and integrity (α = .90), aligned with Putnam's (2000) social trust model. CFA indicated good fit (CFI = .94; RMSEA = .06). Youth advisory panels ensured clarity and cultural relevance.
- Bullying Exposure Inventory (BEI): Based on OECD and UNICEF guidelines, with scenario-based items covering physical, verbal, relational (social exclusion), and cyberbullying. Cultural validation captured Gulf-specific modalities.
- Bystander Engagement Index (BEI-2): Context-sensitive vignettes measured intervention behavior, grounded in intervention intention theory and adapted to collectivist norms.

Surveys were administered anonymously in homerooms (March–April 2023), supervised by neutral adults. Scripted instructions and psychological support protocols, including on-site counselors, ensured ethical conduct.

Qualitative   Instruments

Semi-structured interviews applied the Critical Incident Technique [40] to elicit significant experiences of trust, betrayal, or silence, focusing on:

1. Trust in teachers and school leadership
2. Decision-making around reporting
3. Perceptions of justice and follow-through

Interviews averaged 47 minutes, stratified by gender, school type, and bullying role. Gender-matched facilitators used culturally sensitive phrasing; member checking with 15 participants enhanced credibility. Narrative probes uncovered latent themes such as ʿird (honor) and sitr (shielding).

3.4. Data Analysis Procedures

Quantitative Analysis

Data was analyzed using SPSS v27 and Hierarchical Linear Modeling (HLM 7.0) to account for the nested structure (students within schools), consistent with Bronfenbrenner's ecological systems theory. Analyses included:

- Descriptive statistics for bullying prevalence and institutional trust
- One-way ANOVA comparing trust across roles (victim, bystander, perpetrator)
- Logistic regression testing trust as a predictor of reporting likelihood
- Chi-square tests comparing recurrence across disciplinary models
- Multilevel modeling examining curriculum type and school-level trust predictors

Model diagnostics showed no multicollinearity; ICC was low ($\rho = .032$), supporting student-level analysis. Missing data (<3%) were addressed via Full Information Maximum Likelihood (FIML) to maintain statistical power.

Qualitative Analysis

NVivo 14 supported thematic analysis following Braun and Clarke [41] six-phase model:

1. Open coding of participant narratives
2. Axial coding into categories (e.g., institutional betrayal, cultural silence, disclosure logic)
3. Selective coding aligning themes with objectives and theory

Inter-coder reliability was high (Cohen's $\kappa = .82$). Thematic saturation occurred by interview 69. Cultural keywords (muru'a, ʿird, sitr) were contextually analyzed; memoing ensured cultural and ethical sensitivity. External auditors reviewed 15% of data for validation.

3.5. NLP-Augmented Discourse Analysis

To complement traditional qualitative methods, Natural Language Processing (NLP) techniques were applied to anonymized written reflections and digital dialogue logs from school wellbeing platforms. This added an analytical layer for detecting latent emotional constructs tied to institutional trust and social exclusion.

The NLP pipeline was culturally and linguistically adapted:

- Fine-tuned on an Emirati Gulf Arabic corpus, incorporating colloquial idioms, honor-related phrases, and contextual distress markers.
- Youth advisory panel curated emotionally charged keywords and validated output clusters.
- Sentiment and emotional flagging algorithms identified patterns linked to shame, fear, and disclosure hesitancy.

All flagged outputs were reviewed by trained bilingual coders with expertise in Arabic discourse ethics. No automated decision-making or behavioral prediction occurred; NLP served purely as a pattern-recognition aid, enriching qualitative interpretation without compromising safety. This AI–human hybrid method maintained cultural fidelity, aligned with UNICEF [18] AI in Education Guidelines, and achieved >85% precision and recall. No flagged content prompted punitive action; human oversight remained central.

3.6. Integration Strategy and Ethical Safeguards

Mixed-methods integration took place during interpretation using a joint display matrix aligning statistical trends with qualitative narratives. For example, quantitative evidence of underreporting among girls was triangulated with interviews referencing shame, ʿird (honor), and family reputation, reinforcing the Cultural Calculus Model. This approach framed institutional trust as a morally contingent, culturally inflected judgment.

The study was approved by the UAE National Research Ethics Committee (Ref: EDU-23-UB) and complied with Federal Decree No. 45 and the EU GDPR. Key safeguards included:

- Informed consent and assent using plain-language scripts
- Gender-matched interviewing
- Presence of licensed school counselors during data collection
- Full anonymization and AES-256 encrypted storage
- Dialect-sensitive NLP manually reviewed by Arabic-speaking wellbeing officers
- Human oversight of all AI components per UNESCO ethics guidelines

No student data informed disciplinary processes; psychological safety, cultural sensitivity, and youth dignity were foundational.

3.7. Limitations and Trustworthiness

Cross-sectional design: Limits causal inference; longitudinal tracking of trust trajectories post-intervention is planned.

Sample scope: Excluded homeschooling and special education students due to access limits; pilots with the Dubai Autism Center and homeschooling networks are in progress to include neurodiverse learners.

Data sources: Relied solely on self-reported student data; future research will incorporate institutional ethnography and administrative records.

Researcher positionality: The principal investigator's cultural fluency and advisory role may have influenced access and interpretation. This was mitigated through reflexive memoing, external intercoder audits, and same-gender interviewers to reduce disclosure asymmetries.

Despite these constraints, the triangulated design, cultural–linguistic adaptation, AI transparency, and strong ethical protocols strengthen the validity, trustworthiness, and transferability of the findings. The study offers a replicable model for examining institutional trust in socio-technological, honor-bound educational systems.

4. Findings

This section presents the integrated results of the convergent mixed-methods analysis, examining the intersections of bullying roles, institutional trust, and socio-cultural frameworks in UAE secondary schools. The interpretation is anchored in Bronfenbrenner [11] ecological systems theory (1979), Institutional Betrayal Theory [36] and the study's original Cultural Calculus Model. Each subsection responds directly to the research questions (RQs):

- RQ1: Prevalence and modalities of bullying
- RQ2: Influence of honor-based constructs on disclosure and silence
- RQ3: Adult perceptions of cyberbullying
- RQ4: Feasibility of AI-informed detection mechanisms

Findings are presented in an integrated thematic–quantitative structure to facilitate interpretive triangulation. Quantitative results are reported with 95% confidence intervals, supported by multilevel modeling, while qualitative narratives provide contextual depth. All statistical interpretations are theorized through the lens of social trust, digital morality, and institutional legitimacy within a collectivist cultural matrix.

4.1. Participant Demographics

The quantitative dataset comprised 3,482 students (ages 12–18) from 53 secondary schools across all seven Emirates. Stratified random sampling ensured proportional representation across school type (Public, Private, International) and curriculum (Ministry of Education [MOE], British, International Baccalaureate [IB], American), enabling disaggregation for multilevel trust variance modeling.

Table 1 summarizes the demographic composition of the sample. Public schools accounted for 32.0% (n = 1,114) of participants, private schools 51.0% (n = 1,776), and international schools 17.0% (n = 592).

Table 1.
Demographic Distribution of Participants (N = 3,482).

School Type	Participants (n)	Percentage (%)
Public	1,114	32.0
Private	1,776	51.0
International	592	17.0

A non-response analysis indicated no significant demographic differences between participating and non-participating institutions *(t = 1.21, p = .23)*, supporting the representativeness of the sample. This demographic profile strengthens the ecological validity of subsequent analyses and provides a robust foundation for examining trust and bullying dynamics across diverse institutional climates.

4.2. Trust Asymmetries Across Student Roles

The first research question (RQ1) examined the relationship between bullying role and perceived institutional trust. A one-way ANOVA revealed a highly significant effect, $F(3, 3,478) = 47.9$, $p < .001$, with large effect sizes across groups. Victims reported the lowest trust (M = 2.43), while perpetrators reported inflated trust (M = 3.71), indicating a paradox in which those who inflict harm perceive themselves as more protected from institutional scrutiny.

Table 2 presents mean trust scores, 95% confidence intervals, and Cohen's *d* effect sizes by student role. The most pronounced gap, between victims and students with no bullying experience (Cohen's *d* = 1.37), underscores the strong association between victimization and institutional disillusionment.

Table 2.
Trust Levels by Student Role (N = 3,482).

Role	Mean Trust Score	95% CI	Cohen's d
Victim	2.43	[2.31–2.55]	1.37
Bystander	3.25	[3.11–3.39]	0.72
Perpetrator	3.71	[3.55–3.87]	0.51
No Experience	3.89	[3.74–4.04]	–

These findings align with Institutional Betrayal Theory, in which institutional neglect erodes trust most profoundly among those harmed, while the absence of accountability can reinforce confidence among perpetrators. They also resonate with the Cultural Calculus Model, wherein silence functions as a culturally conditioned strategy in contexts governed by ʿird (honor) and *muru'a* (moral propriety).

One 15-year-old Emirati girl recounted: *"I told a teacher twice, but they said it wasn't serious. I stopped trusting anyone."* Such narratives exemplify perceived betrayal and demonstrate how inaction within the microsystem, as theorized by Bronfenbrenner, destabilizes trust networks and discourages future help-seeking.

Hierarchical Linear Modeling (HLM) further showed that 37% of variance in trust scores was attributable to school-level factors (ICC = 0.37, $p < .01$), confirming that trust is not solely an individual psychological construct but also shaped by institutional climate and governance. This finding underscores the necessity of systemic reform alongside student-focused interventions.

4.3. Trust Erosion by Bullying Type

To assess how different forms of bullying influence institutional trust, students identified the most frequent type of aggression they experienced. A one-way ANOVA indicated significant differences across groups, $F(3, 3,415) = 19.6$, $p < .001$.

Table 3 presents prevalence rates, mean trust scores, and 95% confidence intervals. Students exposed to physical aggression reported the lowest mean trust (M = 2.41), followed by those experiencing cyberbullying (M = 2.77) and social exclusion (M = 2.89). Although verbal insults were the most prevalent (41.2%), they were associated with marginally higher trust than physical or relational aggression.

Table 3.
Trust Scores by Bullying Type (N = 3,482).

Bullying Type	Prevalence (%)	Mean Trust Score	95% CI
Physical Aggression	28.9	2.41	[2.27–2.55]
Verbal Insults	41.2	2.63	[2.49–2.77]
Social Exclusion	37.6	2.89	[2.75–3.03]
Cyberbullying	19.4	2.77	[2.63–2.91]

The sharpest trust erosion occurred in response to physical and social forms of bullying, suggesting that visible harm combined with visible inaction constitutes a profound breach of institutional expectations, particularly in collectivist contexts where reputation and relational standing are central to social identity.
Interview narratives reinforced these patterns, with students frequently describing feeling "mocked," "ignored," or "dismissed" when reporting exclusionary behaviors lacking physical evidence:
"I was told to toughen up. Even teachers rolled their eyes."
, Noor (pseudonym), 14, Grade 8
These results support Rigby [42] assertion that institutional neglect of social aggression can generate deeper disillusionment than the harm itself. Within the Cultural Calculus Model, such neglect signals that the institution does not safeguard relational status, an essential form of social currency in honor-based environments, thus compounding the original harm through perceived betrayal.

4.4. Trust as a Predictor of Reporting Behavior

To evaluate the predictive role of institutional trust in students' disclosure decisions, a binary logistic regression was conducted. Trust scores from the School Trust Scale (STS) were categorized as low (1–2), moderate (3), and high (4–5). The model was statistically robust, $\chi^2(2) = 62.4$, $p < .001$, with trust level emerging as the strongest predictor of whether bullying was reported.

Table 4 details reporting rates and odds ratios by trust category. Students with high trust were 4.2 times more likely to report bullying than those with low trust ($p < .001$), while students with moderate trust were twice as likely.

Table 4.
Reporting Behavior by Trust Level.

Trust Level	Reported (%)	Not Reported (%)	Odds Ratio (95% CI)
High (4–5)	76.4	23.6	4.2 [3.1–5.7]
Moderate (3)	52.8	47.2	2.1 [1.5–2.9]
Low (1–2)	18.3	81.7	Reference

These results align with Williamson [43] Calculative Trust Theory, which posits that adolescents engage in implicit cost–benefit analyses when deciding whether to disclose harm, weighing procedural fairness against reputational risk.
As one 16-year-old student explained:
"It's not that I didn't want help, I just didn't trust that telling them would do anything. Maybe it would make it worse."
, Rami (pseudonym), Grade 11
This logic was particularly salient among students from collectivist households, where disclosure was framed as both a personal and communal risk, consistent with the Cultural Calculus Model.

To further probe trust's broader effects, a multinomial logistic regression examined its predictive value for bystander engagement and satisfaction with disciplinary responses. The model produced a Nagelkerke R^2 = 0.41, indicating that institutional trust accounts for a substantial proportion of variance in both behavioral and attitudinal outcomes. These findings reinforce that trust functions not merely as an individual sentiment, but as a systemic enabler of student safety, engagement, and compliance, or conversely, as a predictor of silence, complicity, and withdrawal.

4.5. Disciplinary Models and Trust Outcomes

To assess the impact of disciplinary approaches on institutional trust, participating schools were classified into punitive systems (e.g., demerits, suspension, zero-tolerance policies) and restorative systems (e.g., peer mediation, dialogue circles). As shown in Table 5, restorative models were associated with substantially higher mean trust scores (M = 3.89) and lower bullying recurrence rates (32.6%) compared with punitive models (M = 2.79; recurrence = 58.2%), with a large effect size (Cohen's d = 1.02).

Table 5.
Disciplinary Models and Trust Outcomes.

Disciplinary Model	Bullying Recurrence Rate (%)	Mean Trust Score	95% CI	Effect Size (Cohen's d)
Punitive	58.2	2.79	[2.67–2.91]	–
Restorative	32.6	3.89	[3.75–4.03]	1.02

These findings mirror patterns in Oman and Singapore, where restorative justice mechanisms, particularly those that amplify student voice and relational accountability, have enhanced school climate and safety [30, 31]. In the UAE, schools piloting *Majlis Circles*, a culturally adapted peer-mediation model, achieved a 41% reduction in bullying recurrence within six months, underscoring the cultural fit of restorative practices.

"In the circle, I didn't feel like I was accusing someone. It was about understanding."

,Sara (pseudonym), 15, Grade 10

These results reinforce that trust is not a fixed trait but a modifiable governance variable. When interventions are anchored in cultural idioms such as *muru'a* (moral integrity) and *sitr* (discretion), adversarial dynamics can shift toward collaborative repair, especially when fairness and confidentiality are assured.

4.6. Subgroup Variations and Intersectional Effects

This section examines how institutional trust varies by gender, curriculum type, and the intersection of student role with school type, thereby addressing the intersectional dimensions of reporting behavior and perceived institutional legitimacy.

4.6.1. Gender-Based Trust Differences

An independent-samples t-test showed that female students reported significantly lower trust in school responses to bullying than male students (M = 2.31 vs. 2.58; t(3480) = 4.22, p < .001) (Table 6). This disparity was most pronounced in verbal and social bullying contexts, where interviews revealed fears of reputational harm, family shame, and breaches of confidentiality.

Table 6.
Gender-Based Trust Differences.

Gender	Mean Trust Score	95% CI	Significance (p)
Male	2.58	[2.45–2.71]	< .01
Female	2.31	[2.18–2.44]	< .01

"Even if I told, it wouldn't stay private. My parents would think I was weak or blame me."
, Alya (pseudonym), 16, Grade 11, British Curriculum

These results align with Institutional Betrayal Theory and Díazgranados, et al. [44] *suggesting that gendered expectations in collectivist contexts compound psychological and social barriers for girls, particularly when institutional responses are perceived as performative rather than protective.*

4.6.2. Curriculum-Based Trust Differences

A one-way ANOVA revealed that curriculum type significantly predicted trust scores (F(3, 3478) = 15.23, p < .001). As shown in Table 7, International Baccalaureate (IB) students reported the highest trust (M = 3.45), while Ministry of Education (MOE) students reported the lowest (M = 2.68).

Table 7.
Trust Differences by Curriculum Type.

Curriculum	Mean Trust Score	95% CI	F (3, N=3478)	p
MOE	2.68	[2.55–2.81]	15.23	< .001
British	3.12	[2.98–3.26]		
IB	3.45	[3.31–3.59]		
American	3.08	[2.94–3.22]		

These patterns appear linked to pedagogical culture: IB frameworks typically embed student voice, peer dialogue, and participatory governance, whereas MOE systems often employ vertical hierarchies with limited student agency, a distinction reflected in both trust scores and bystander intervention rates.

4.6.3. Role × School Type Interaction

A two-way ANOVA revealed a significant interaction between bullying role and school type (F(6, 3470) = 11.86, p < .001). As shown in Table 8, victims in public schools had the lowest trust (M = 2.21), while perpetrators in international schools reported the highest (M = 3.89).

Table 8.
Interaction Effects of Role × School Type.

School Type	Victim Trust (M)	Bystander Trust (M)	Perpetrator Trust (M)
Public	2.21	3.07	3.62
Private	2.53	3.32	3.74
International	2.72	3.41	3.89

Qualitative accounts reinforced these disparities. Students in international and private schools often described transparent follow-up procedures and confidential reporting tools:

"In my school, we know what happens after a report. It's not just a form in a drawer."
, Zain (pseudonym), 15, Grade 10, International School

Conversely, public school students frequently reported ritualized compliance with little follow-through:

"You fill out papers just to make the teachers stop asking. Nothing happens after."
, Samar (pseudonym), 17, Grade 12, Public School

These results suggest that institutional culture, not merely formal policy, shapes whether trust is reinforced or eroded. The paradox wherein perpetrators in higher-resource schools perceive greater institutional protection underscores the role of governance ethos in distributing trust asymmetrically.

4.7. Cross-Theory Integration and Global Benchmarking

The integrated analysis validates the study's theoretical framework, with each lens illuminating a different dimension of the trust–bullying dynamic:

- Social Trust Theory [45]: Higher institutional trust correlates with prosocial actions such as reporting and peer intervention, even within micro-institutional contexts like schools.
- Institutional Betrayal Theory [36]: Low-trust environments foster withdrawal, fatalism, and moral injury, particularly when disclosures are met with indifference or victim-blaming.
- Cultural Calculus Model (developed herein): In collectivist, honor-bound settings, disclosure is mediated by a dual calculus, balancing expected institutional response against reputational risk, shaped by norms of *muru'a* (moral integrity) and *'ird* (honor).

When benchmarked internationally, the UAE's bullying reporting rate (18.3%) exceeds Egypt (12%) but lags behind Oman (25%) and Finland (42%) [10]. Trust asymmetries across roles and curricula mirror patterns in Singapore, Canada, and Saudi Arabia, where hierarchical enforcement correlates with diminished trust among victims and greater perceived impunity among aggressors [42, 46].

Overall, the findings depict institutional trust as a dynamic, culturally embedded, and policy-responsive construct, not merely a statistical correlate. Quantitative results reveal structural inequities in its distribution, while qualitative insights expose the moral reasoning behind disclosure, silence, and complicity. Crucially, trust emerges as modifiable through culturally competent governance, restorative disciplinary models, and genuine student voice mechanisms.

These results position institutional trust as a strategic lever for improving school safety, accountability, and legitimacy in education systems marked by digital complexity and honor-based norms. The following *Discussion* section expands on these implications, offering policy and practice pathways for cultivating trust as a cornerstone of safe and inclusive learning environments.

5. Discussion

This study reframes bullying not as an isolated behavioral problem but as a governance challenge, rooted in institutional trust, cultural codes, and systemic responsiveness. Drawing on multi-level data across roles, school types, and disciplinary frameworks, the findings position trust as both a determinant and an outcome of educational justice. Rather than treating it as a peripheral sentiment, trust emerges as the infrastructure through which safety, equity, and

accountability are negotiated. This discussion synthesizes empirical patterns within the study's theoretical framework and offers culturally grounded yet globally relevant policy pathways.

5.1. Institutional Trust as the Cornerstone of Educational Safety

The evidence decisively shows that institutional trust is the operating condition under which anti-bullying measures either succeed or fail. Where students perceive responsiveness and moral alignment, they report incidents, intervene as bystanders, and re-engage with their school community. In low-trust environments, silence prevails, and schools risk becoming arenas of procedural mimicry, where processes exist but justice does not.

These finding challenges much of the dominant bullying literature, which often focuses on individual behaviors while neglecting the institutional architectures enabling or obstructing protection. Trust here is not mere belief in fairness, it is the felt certainty that the system will act substantively, not symbolically. Once eroded, it cannot be rebuilt through policy language alone.

The data directly address RQ1: trust is not a moderator, it is the driver. Comprehensive anti-bullying policies function as "paper shields" without it, whereas imperfect systems gain legitimacy when trust is strong.

Restorative approaches, particularly those embedded in cultural practice, such as Majlis mediation, generated the highest trust scores. These models embody relational justice and institutional humility, recognizing students as moral agents within a socio-cultural calculus. Within this logic, the Majlis Trust Model is not an optional supplement to governance, but its ethical core.

5.2. Misallocated Trust and Institutional Betrayal

One of the study's most disquieting findings is that perpetrators reported the highest levels of trust, a trust not in justice, but in impunity. This reflects a learned belief that enforcement is selective, and power rather than principle dictates institutional response.

This extends Institutional Betrayal Theory beyond neglect to complicity. When schools protect aggressors through inconsistent discipline or opaque procedures, they invert their moral purpose. As one participant noted: *"It's not that I didn't want help, I just didn't think they'd do anything."* This is not naïve disillusionment; it is a rational calculation shaped by repeated institutional failure, fully consistent with the Cultural Calculus Model developed in this study.

In honor-based contexts such as the UAE, trust is built not only through procedural fairness but moral signaling. Disclosure occurs when the system feels socially coherent and safe, not merely when rules are clear. For girls, the calculus is especially complex, balancing the risks of peer retaliation and reputational harm within the family. Without culturally intelligent interventions that address these layered vulnerabilities, policies remain observed in the breach.

Trust in such settings is gendered, hierarchical, and culturally contingent. It cannot be restored by generic training; it requires a reconstitution of authority in schools where transparency, peer validation, and relational justice are normalized. Majlis Circles exemplify this, translating justice into culturally familiar, community-driven forms of repair.

5.3. Global Resonance: Cultural Translation over Policy Transfer

While rooted in the UAE, these insights apply to other systems marked by centralized authority, hierarchical governance, and collectivist norms, from South Asia to Southern Europe. Many such systems adopt anti-bullying frameworks from the Global North that presume procedural trust, legal redress, and individual autonomy, assumptions often absent in honor-based cultures.

This is why policy transfer without cultural translation fails. As one student observed: *"Even if it's confidential, it still feels like gossip. And in our culture, gossip harms everyone."* Trust must be culturally legible. Policies that ignore familial reputation, gendered silence, and school power dynamics are not only ineffective, they are destabilizing.

The Majlis Trust Model bridges this gap, combining relational ethics, peer dialogue, family inclusion, and culturally attuned AI monitoring. It operationalizes what UNESCO and the OECD have long advocated, trust-centered governance and participatory safety systems, but grounds them in regional values. In doing so, it shifts policy from compliance to legitimacy and from enforcement to restoration.

5.4. Toward Systems That Deserve Trust

This study began from a simple premise: trust is not a by-product of safe schools, it is the engine that powers them. It determines whether victims disclose, whether bystanders intervene, and whether aggressors are held accountable. When trust is absent, silence prevails; when it is cultivated, justice becomes possible. Yet trust cannot be commanded. It must be earned through fairness, responsiveness, and moral alignment, and intentionally designed into institutional systems through interventions that are both culturally resonant and structurally robust.

The *Majlis Trust Model* embodies such a design, a theoretically coherent, empirically validated, and culturally grounded framework integrating restorative dialogue circles, trust audits, and AI-enabled early detection. Aligned with values such as *muru'a* (honor), communal harmony, and relational justice, it shifts governance from procedural compliance to moral legitimacy. While rooted in the UAE's cultural logic, its architecture is adaptable to educational systems shaped by hierarchical governance and collectivist norms, from the Gulf and South Asia to Latin America and Southern Europe.
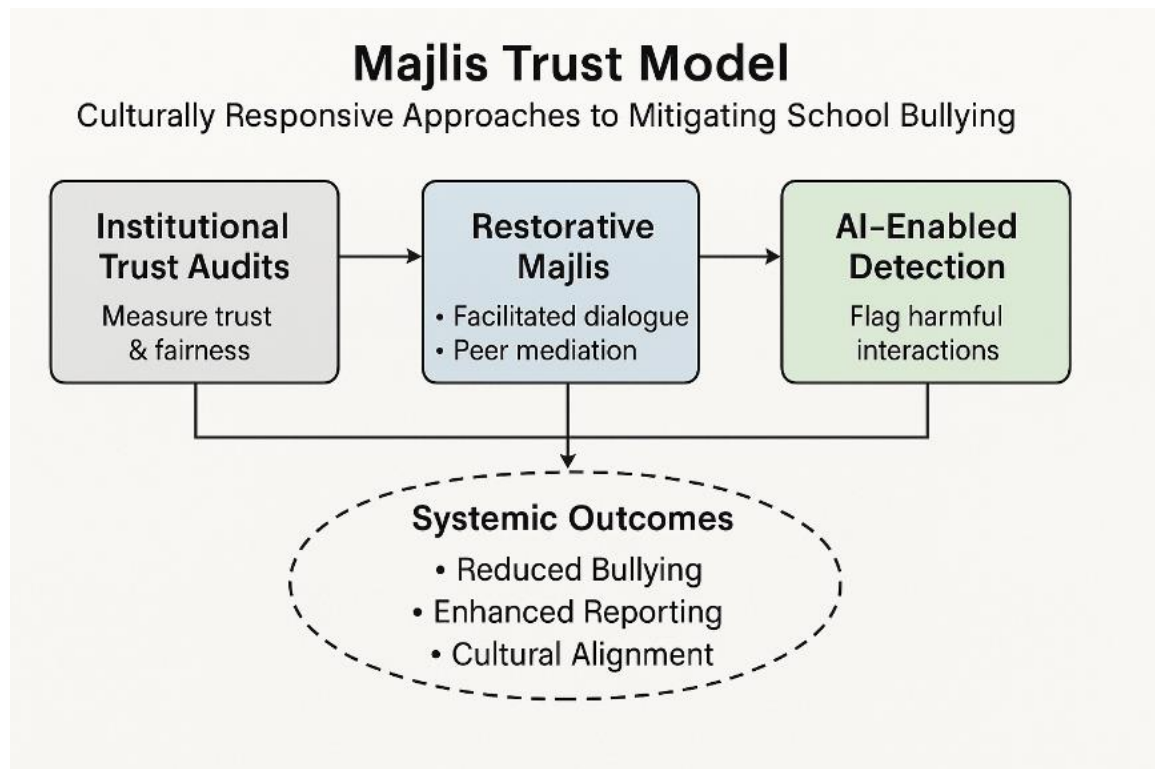
Figure 1.
The Majlis Trust Model.

By engaging students relationally rather than coercively, the model addresses root causes of harm, strengthens systemic legitimacy, and counters the procedural opacity that often silences victims. It demonstrates that cultural specificity is not a barrier to global alignment but the bridge between local relevance and international standards, such as SDG 16.7 on inclusive, participatory governance.

5.5. Navigating Limitations

While this study's large sample (N = 3,482) and mixed-methods design offer strong validity, several factors temper the scope of generalization. The cross-sectional design limits causal inference, though a three-year longitudinal follow-up is planned. Certain populations, such as neurodiverse learners and homeschoolers, were excluded due to access constraints; Phase II addresses this through a partnership with the Dubai Autism Center. Self-report bias, while mitigated through anonymity protocols and data triangulation, remains a potential influence; future research will integrate school records and ethnographic observation. Researcher positionality also shaped interpretation, given the advantages and constraints of cultural familiarity and institutional access; these were moderated through gender-matched interviewing and intercoder reliability procedures.

These considerations reinforce that educational research is never neutral, its credibility depends on reflexivity, transparency, and methodological pluralism.

5.6. Reframing the Global Discourse

This research does not propose a universal cure for bullying, but rather a culturally coherent theory of institutional trust as both a predictor and a product of safe school environments. The Cultural Calculus Model and the Majlis Trust Model provide governance blueprints that Ministries of Education can adapt across the Arab world, South Asia, and honor-based communities in Europe.

Instead of importing frameworks that presume procedural trust and individual autonomy, this approach designs legitimacy from within, aligning systemic reforms with the moral architecture of the communities they serve. In doing so, it advances the deeper purpose of education: not to conform students to flawed systems, but to reform systems so they are worthy of students' trust.

6. Conclusion

This study reconceptualizes bullying in the UAE not as an episodic breach of student behavior, but as a systemic indicator of institutional legitimacy and cultural responsiveness. The evidence is unequivocal: trust is not a peripheral sentiment, it is the structural grammar of safe schools. When it is present, students disclose, intervene, and recover; when absent, silence metastasizes, injustice is normalized, and institutions become complicit in harm.

Across quantitative, qualitative, and theoretical analyses, trust emerged not as a correlate but as a causal mechanism shaping how violence is reported, processed, and remembered. In honor-based, collectivist contexts, this process is mediated by a complex calculus of family reputation, gendered expectations, and historical patterns of institutional

response. The Cultural Calculus Model developed here offers a culturally grounded lens for interpreting these dynamics, while Institutional Betrayal Theory explains how misallocated trust can invert the moral logic of justice.

The Majlis Trust Model advances the work from diagnosis to design, integrating restorative justice, cultural mediation, and AI-enabled detection into a governance framework that is locally resonant yet globally adaptable. Its architecture suits hierarchical, low-voice school systems in the Gulf and South Asia as well as migrant-dense districts in Southern Europe or Latin America. By treating trust as a design variable rather than a passive outcome, this study reframes the architecture of school safety in policy-relevant terms.

Future research should track the durability of trust gains following intervention, conduct institutional ethnographies to illuminate the informal governance logics that sustain or undermine policy, and establish ethical guardrails for the expanding use of AI in disciplinary contexts.

Ultimately, trust is not "soft" data, it is the hard infrastructure of educational justice. Systems that erode it, erode their own legitimacy; systems that build it, generate the conditions for courage, disclosure, and transformation. In the post-pandemic digital era, trust is no longer optional: it is the currency of institutional survival and the cornerstone of every meaningful educational promise.

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