BHINNECARD: A CARD-BASED EDUCATIONAL GAME TO FOSTER TOLERANCE IN INDONESIAN JUNIOR HIGH SCHOOLS

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ABSTRACT
Intolerance among Indonesian adolescents—manifested in prejudice, identity-based bullying, and fragile classroom harmony—signals gaps in the internalization of pluralism at school. This study addressed that challenge by developing and testing BHINNECARD, a card-based guidance medium grounded in the spirit of *Bhinneka Tunggal Ika* to foster tolerance through experiential dialogue, perspective-taking, and action planning. The objectives were to (1) design a culturally contextualized educational card game for junior high schools, (2) establish its feasibility through expert and practitioner validation, and (3) evaluate its effectiveness for improving students' tolerance attitudes. Using an R&D design with the 4D model (Define–Design–Develop–Disseminate), we conducted expert reviews (media and content), teacher usability assessments, and a one-group pretest–posttest trial with 66 students at SMP BOPKRI 1 Yogyakarta. Instruments included structured validation sheets and a 40-item tolerance scale with strong internal consistency (overall $\alpha \geq .90$; item–total $r = .304–.674$). Media experts rated the prototype highly feasible (108/108), content experts rated it feasible (92/116) with minor editorial refinements, and counselors judged classroom practicality as high. Effectiveness testing showed a significant gain from pretest ($M = 103.14$, $SD = 8.22$) to posttest ($M = 127.58$, $SD = 11.87$), t-test $p < .001$, indicating meaningful attitudinal improvement. We conclude that BHINNECARD is an instructionally efficacious, low-cost medium that can be implemented within standard group-guidance sessions to cultivate tolerance. Practically, schools can integrate it into character-education strands to scaffold respectful dialogue and inclusive norms with minimal preparation. Future research should employ multi-site randomized or quasi-experimental designs, streamline overlapping items in the tolerance scale, and include behavioral follow-ups (e.g., teacher logs or peer nominations) to corroborate self-report outcomes.

Keywords: Adolescents; Character education; Game-based learning; School counseling; Tolerance

INTRODUCTION

The phenomenon of intolerance among junior high school students in Indonesia has emerged as one of the most pressing challenges in the field of education today. Conflicts among students rooted in differences of ethnicity, religion, and culture still occur frequently, resulting in negative impacts on school harmony and learning climates. The emergence of discriminatory behavior and bullying based on social identity reflects the weak internalization of tolerance values among students. This situation not only disrupts social cohesion but also signals a moral crisis within the educational environment (Ridwan Effendi et al., 2021). The 2025 report by the SETARA Institute revealed that although 70.2% of senior high school students demonstrated tolerant attitudes, 22.4% remained passively intolerant and 5% actively intolerant. Even exposure to radical ideologies increased by 0.6%. While this data was gathered from high school students, similar patterns are increasingly evident among junior high school students, whose developmental stage is critical for character formation. This trend underscores that tolerance is not an innate attitude but a value that must be cultivated through systematic and continuous education. Therefore, schools play a central role in shaping young generations who can live harmoniously amid diversity.

Schools, as formal educational institutions, hold a strategic position in developing students' character—particularly their tolerance toward diversity. Teachers, especially guidance and counseling (BK) teachers, act as facilitators who instill values of humanity and national identity (Yusro & Ardania, 2023). However,

not all teachers are capable of effectively teaching tolerance due to limitations in learning media, monotonous teaching methods, and insufficient professional training (Tsalisa, 2024). Students today belong to the digital generation, who are accustomed to interactive and visually engaging learning experiences, while most schools still rely on conventional methods such as textbooks and lectures. Hence, innovative and adaptive learning media are urgently needed to address the changing learning preferences of students (Zaman & Kurnia, 2023). Common approaches such as moral education or lectures on diversity often fail to foster meaningful internalization of tolerance. What is needed instead is an experiential learning model that allows students to practice tolerance through real interaction, collaboration, and reflection. Educational media, such as interactive games or visual cards, are promising alternatives to make value learning more concrete and relatable for students.

Previous studies have demonstrated that interactive learning media, such as flashcards, games, and digital simulations, can significantly enhance students' understanding of moral and social values. Ardiyanti (2022) found that flashcards can improve children's ability to appreciate differences by presenting simple visual representations of moral dilemmas. Similarly, Aqmarina and Susilo (2025) reported that digital quiz applications and videos increase comprehension of Islamic moral education concepts. Game-based learning, in particular, offers significant advantages because it engages students in social interaction, discussion, and decision-making, thereby strengthening empathy and perspective-taking (Berk, 2018; Vygotsky, 1978). Despite these benefits, educational card games specifically designed to teach tolerance remain rare in schools, limiting opportunities for students to develop inclusive and cooperative behaviors (Syihabbudin & Umami, 2021). Thus, the integration of educational card games into classroom or counseling settings could bridge this gap and promote tolerance more effectively through active learning experiences.

Junior high school students, who are in the early adolescent stage, are highly sensitive to social influences as they begin shaping their identities and exploring interpersonal relationships. Without appropriate value guidance, they may become susceptible to prejudice and social exclusion (Ridwan, 2016). Furthermore, the dominance of social media in students' lives poses another challenge, as it often exposes them to hate speech and intolerant narratives that shape negative perceptions (SETARA Institute, 2025). To counter these influences, it is essential to provide transformative educational media that promote empathy, critical thinking, and inclusivity. Although prior studies have highlighted the potential of interactive media to build moral values, few have explored contextualized card-based media that directly target tolerance education for junior high school students. Most existing moral education interventions remain limited to theoretical discussions or digital platforms, lacking tactile and social engagement components. Consequently, there exists a clear research gap in developing an interactive, culture-based, and character-oriented learning medium that integrates Indonesian multicultural contexts into practical learning experiences. Addressing this gap is crucial to ensure that tolerance is not merely understood cognitively but also internalized affectively and behaviorally.

This study aims to develop, validate, and test the effectiveness of an educational card game called "BHINNECARD" as a guidance media for fostering tolerance among junior high school students. The "BHINNECARD" media is designed as an innovative tool for group counseling sessions, providing students with opportunities to discuss, reflect, and experience diversity through game-based scenarios. The novelty of this research lies in integrating the philosophical spirit of Bhinneka Tunggal Ika ("Unity in Diversity") into a structured counseling-based educational game, combining cognitive, affective, and social aspects of tolerance learning. Unlike previous studies that focus on moral knowledge or digital simulations, this study emphasizes the experiential learning dimension through tangible, interactive media grounded in Indonesia's multicultural identity. The scope of this study includes (1) the development process of the BHINNECARD media following the principles of educational media design, (2) validation by media and

content experts to assess its feasibility, (3) user assessment by BK teachers, and (4) testing its effectiveness in improving students' tolerance attitudes within the group guidance context. The study was conducted among junior high school students in Yogyakarta, representing a diverse cultural and social environment conducive to tolerance education. Through this development, the research contributes to the theoretical advancement of character education and counseling media innovation while providing practical implications for teachers and schools in promoting inclusive, empathy-based learning practices that nurture harmony in Indonesia's plural society.

METHOD

Research Design and Approach

This study adopted a Research and Development (R&D) design to create and evaluate BHINNECARD (Bhinneka Tunggal Ika Card) as a tolerance-based learning medium for junior high school students. The R&D approach was selected because it enables systematic product design, expert validation, iterative refinement, and field testing to meet authentic instructional needs (Borg & Gall, 2007; Sugiyono, 2019). The development procedure followed the 4D model—Define, Design, Develop, and Disseminate—originally proposed by Thiagarajan, Semmel, and Semmel (1974) and widely applied in instructional media research due to its structured stages and iterative validation loops (Hariyanto, Kurniawan, & Widodo, 2022). In the Define phase, we analyzed learner characteristics, needs, and contextual constraints to specify the problem and the intended learning outcomes. The Design phase translated those specifications into an initial product blueprint and instructional flow. The Develop phase implemented expert validations and successive try-outs to establish feasibility, usability, and preliminary effectiveness. The Disseminate phase prepared the finalized product for broader implementation in authentic school settings. Figure 3.1 (Four-D Development Model, adapted from Thiagarajan et al., 1974) guided the overall workflow. This framework supported the development of BHINNECARD as an engaging guidance medium aimed at nurturing students' tolerance, empathy, and reflective thinking; the media was examined through expert review, teacher appraisal, and student trials to ensure instructional relevance and practical usability.

Population and Sample / Participants

The study took place at SMP BOPKRI 1 Yogyakarta, a school selected for its diversity and readiness to pilot character-education innovations. Participants comprised two expert validators (one in educational media design and one in guidance-and-counseling content), two Guidance and Counseling (BK) teachers who appraised the medium's applicability and classroom practicality, and 66 students from Grades VII and VIII who participated in field testing and tolerance-scale assessments. A purposive sampling strategy was employed to include individuals with relevant expertise or direct involvement in school counseling and character education (Creswell & Creswell, 2018). The research timeline progressed from variable specification and information gathering in August–November 2024, through product development in January 2025, validation and revision in April 2025, and culminated in field testing in May 2025.

Data Collection Techniques and Instruments

Multiple sources of evidence were used to ensure a comprehensive and credible evaluation: expert validation sheets, a teacher validation sheet, and a tolerance attitude scale for students. Expert validation was conducted in two strands. The material-expert validation examined content feasibility (alignment with curriculum standards and learner needs), breadth and depth of material (conceptual coverage and insightfulness), linguistic feasibility (clarity, communicativeness, and consistency), and presentation quality (systematic flow, motivational appeal, and participatory potential). The media-expert validation focused on appearance and content (proportional design and meaningful graphics), accessibility

(practicality for students and teachers, including clarity of play instructions), and overall media quality (layout, typography, and visual clarity). Both expert instruments used a four-point Likert scale (Very Good, Good, Fair, Poor) and were structured to surface both strengths and areas requiring revision.

In addition, BK teachers evaluated BHINNECARD's applicability to school counseling contexts. Their appraisal addressed content suitability (including alignment with SKKPD standards), content relevance (the presence of critical prompts and real-life fit), visual design (consistency, structure, and harmony across card, guide, and box), and language (clarity and communicative effectiveness). Finally, the student tolerance attitude was measured using a 40-item Likert instrument (5-point scale: Strongly Agree to Strongly Disagree) adapted from validated tools reported by Novitasari and Wardani (2020), whose studies showed robust internal consistency (Cronbach's alpha ≈ 0.77–0.95) across primary and lower-secondary populations. The scale operationalized two domains—religious tolerance (e.g., respecting diverse beliefs, fairness in interfaith interactions, avoidance of discrimination or hate speech, and civility in discussions) and cultural tolerance (e.g., appreciation of local and other cultures, openness to diverse customs, foods, and attire, rejection of stereotypes, and support for cultural preservation). Favorable and unfavorable items were balanced within each domain to reduce response bias and to capture nuanced attitudinal change.

Data Analysis Procedures

Data analysis combined inferential and descriptive techniques. Item validity for questionnaire-based measures was examined using the Pearson Product–Moment correlation to ascertain that each item contributed meaningfully to its construct. Reliability was assessed via Cronbach's alpha, with $\alpha \geq 0.70$ regarded as acceptable for internal consistency in educational research (Cohen, Manion, & Morrison, 2018). To test the effectiveness of BHINNECARD, the study employed a one-group pretest–posttest design with students and analyzed the gain using a Paired-Samples t-test; a statistically significant improvement from pretest to posttest indicated a positive effect on tolerance attitudes (Sugiyono, 2019). Expert and teacher validations were summarized using descriptive statistics (e.g., means and percentage agreement) and then classified into feasibility bands following Sukardi's (2003) guidance. Specifically, the observed score (S) was mapped to categories using an interval approach with Smin, Smax, and class width (P): "Very Feasible" for $(Smin + 3P) \leq S \leq Smax$; "Feasible" for $(Smin + 2P) \leq S \leq (Smin + 3P - 1)$; "Less Feasible" for $(Smin + P) \leq S \leq (Smin + 2P - 1)$; and "Not Feasible" for $Smin \leq S \leq (Smin + P - 1)$. These categories were then interpreted substantively: Very Feasible signified that BHINNECARD was highly suitable for counseling use; Feasible indicated suitability with minor refinements; Less Feasible implied substantive revisions were needed prior to routine use; and Not Feasible indicated unsuitability in its current form.

Validity, Reliability, and Ethical Considerations

Content validity was ensured through structured expert review that triangulated pedagogical accuracy, curricular alignment, and media design quality. Construct validity was supported by item-level correlations and the theoretical mapping of sub-domains within the tolerance scale. Reliability was established through Cronbach's alpha, targeting $\alpha \geq 0.70$ for all scales to indicate acceptable internal consistency (Cohen et al., 2018). Ethical safeguards were applied throughout. Informed consent was obtained from teachers and students (with school-level permission), and participants were briefed about study aims, procedures, voluntary participation, and the right to withdraw. Confidentiality was protected by anonymizing student data and reporting results in aggregate form. The principle of non-maleficence guided the design of BHINNECARD activities to avoid cultural or emotional harm, promote inclusivity, and respect differences. The study proceeded under institutional and school authorization, aligning with recognized educational-research ethics (BERA, 2018) and local administrative procedures.

RESULTS AND DISCUSSION

Product Feasibility Judged by Experts

The BHINNECARD prototype underwent two layers of expert appraisal: (a) a media-design validation spanning 27 indicators (score range 27–108), and (b) a content validation spanning 29 indicators (score range 29–116). The media expert awarded a perfect 108/108, categorizing the product as highly feasible in terms of visual design quality, accessibility, and practicality of use in school settings. The content expert assigned 92/116, placing the product in the feasible category while advising targeted refinements to narrative clarity, wording, and the breadth of concept coverage. Together, these judgments indicate that, at baseline, the artifact is implementation-ready from a design standpoint and pedagogically adequate from a content standpoint, pending light-touch editorial enhancements.

Game- or card-based media are particularly sensitive to usability, clarity of rules, and visual salience; when these features are strong, learner engagement and task persistence tend to increase (Mayer, 2021; Plass, Homer, & Kinzer, 2015). Design feasibility that emphasizes clean interface cues, unambiguous instructions, and rapid feedback is repeatedly linked to better learning outcomes in serious games and educational card games (Connolly, Boyle, MacArthur, Hainey, & Boyle, 2012; Clark, Tanner-Smith, & Killingsworth, 2016). The expert ratings for BHINNECARD align with this evidence: its visual structure (clear color coding, typography, and category markers) reduces extraneous cognitive load and foregrounds the intended cognitive–affective work around tolerance (Mayer, 2021).

The high design feasibility provides a necessary precondition for downstream effects on knowledge, reflection, and planned action. In character and citizenship education—domains in which affective and dialogic components are central—good design is not superficial; it scaffolds perspective taking, norm cueing, and reflective talk (Kohlberg, 1984; Parker, 2006). Practically, these expert results legitimize the decision to advance to classroom trials and suggest that subsequent gains are likely not suppressed by design flaws but will reflect the pedagogical core of the intervention.

Practicality: Usability in Real School Counseling

Two practicing school counselors who piloted the media in group guidance sessions rated BHINNECARD as highly feasible (112/112 and 100/112 on the user feasibility scale). Their qualitative feedback converged on three actionable points: (1) provide a concise, visually clean leaflet with the flow of play and prompt sequencing; (2) increase the contrast of fonts and background in certain cards to aid readability; (3) maintain explicit category markers (e.g., Suku, Agama, Ras, Adat istiadat, Refleksi) to help students navigate the discussion.

Teacher- and counselor-centered judgments of practicality are strong predictors of sustained adoption of instructional innovations (Dusenbury, Brannigan, Falco, & Hansen, 2003). In social–emotional learning (SEL) and school counseling contexts, interventions that are quick to set up, come with ready-to-use guides, and contain clear prompts are more likely to be implemented with fidelity (Jones & Bouffard, 2012). Group-based formats are particularly effective for rehearsing social reasoning, empathy, and conflict navigation because they simulate peer dynamics and allow meta-communication about norms (McMahon, Lerner, & Britton, 2013; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The counselors' requests—a simpler leaflet and stronger visual contrast—are usability refinements consistent with what implementation science would predict (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

High practicality suggests low barriers to uptake. The lightweight adjustments proposed by counselors are cosmetic-functional rather than structural, implying a short runway to scale. For program leaders, such feedback flags the small investments (layout, contrast, quick-start guide) that yield disproportionate gains in classroom readiness and fidelity.

Instrument Quality: Validity and Reliability of the Measures

To quantify outcomes and processes, a 40-item instrument was validated on n = 60 students (α = .05, r-table = 0.254). All 40 items exceeded the criterion (r = 0.304–0.674), indicating satisfactory item discrimination. Internal consistency analyses showed very strong reliability, with maximum Cronbach's α = .989 on one subscale and overall coefficients well above conventional adequacy thresholds.

In educational and psychological measurement, Cronbach's alpha values ≥ .70 are typically considered acceptable; ≥ .80 good; and ≥ .90 excellent, particularly for individual-level decisions (Tavakol & Dennick, 2011). Extremely high alphas can sometimes flag redundant items that measure near-identical content, suggesting an opportunity to shorten scales without compromising reliability (Streiner, 2003; Henson, 2001). The current instrument sits squarely in the excellent range, supporting confident interpretation of pre–post changes while inviting a future item audit (e.g., item–total correlations, exploratory bifactor modeling) to eliminate redundancy and reduce respondent burden (Reise, Bonifay, & Haviland, 2013).

Strong psychometrics mean observed effects are less likely to be measurement artifacts. For practitioners, high reliability increases trust in score changes observed over short time frames. For researchers, it enables more precise estimation of effect sizes and subgroup analyses. A judicious item-trimming in subsequent cycles could further enhance efficiency in school timetables without sacrificing construct coverage.

Effectiveness: Gains from Pretest to Posttest

Normality checks using Kolmogorov–Smirnov indicated that both pretest (p = .078) and posttest (p = .200) scores were distributed normally at α = .05. The paired t-test on n = 66 students showed a robust mean increase from 103.14 (SD = 8.22) at pretest to 127.58 (SD = 11.87) at posttest, a gain of +24.44 points, statistically significant at $p < .001$ (two-tailed). The posttest standard deviation was modestly larger, suggesting greater spread in students' post-intervention strategies and reflections.

Meta-analyses on digital and analog game-based learning (GBL) consistently report positive effects on knowledge, motivation, and higher-order skills, especially when mechanics are aligned with the target competencies and feedback is timely (Clark et al., 2016; Wouters, van Nimwegen, van Oostendorp, & van der Spek, 2013; Sitzmann, 2011). In character education and tolerance-building, interventions that activate guided dialogue, perspective-taking, and structured contact reliably improve prosocial attitudes and reduce bias (Pettigrew & Tropp, 2006; Paluck & Green, 2009; Rutland & Killen, 2015). The observed gain for BHINNECARD is consistent with these literatures, as the cards embed contextualized prompts about diversity (SARA), push for reflective reasoning, and culminate in explicit action planning.

The magnitude and significance of the pre–post gains indicate that BHINNECARD is not merely engaging—it is instructionally efficacious for the targeted outcomes (tolerance knowledge and planned action). The slightly larger posttest SD likely reflects students' diverse, personalized action plans after exposure to scenarios, a desirable dispersion for authentic problem solving (Zimmerman, 2002). For schools, this signals that even brief, well-structured card-based sessions can move the needle on tolerance competencies within ordinary guidance periods.

Design Logic: Why Cards, Why Group Counseling?

Iterative design revisions strengthened visual identity (distinct category colors, improved font/background contrast), packaging (compact box sized to 6×9 cm cards), and "quick-start" materials (leaflet and QR-coded resources). The play flow integrates a Board Rush phase to prime quick ideation, followed by group discussion to negotiate meanings and reflection to transform ideas into personal commitments.

Card-based mechanics promote turn-taking, focus, and immediacy while lowering setup time—features repeatedly tied to classroom "stickiness" and habit formation (Kafai & Burke, 2015; Gee, 2007). Group counseling provides a semi-structured social field for practicing empathy, assertive communication, and

norm-setting—precisely the competencies that undergird tolerance (Durlak et al., 2011; Brown, 2010). The sequence prompt → dialogue → commitment mirrors effective experiential and deliberative pedagogies used in citizenship and peace education (Hess & McAvoy, 2015; Davies, 2006).

The design is not arbitrary: it couples fast, low-friction entry with deep, guided meaning-making. This is especially salient in time-constrained school timetables. By anchoring prompts in locally salient diversity contexts (SARA), the cards support far-transfer from classroom talk to lived school interactions, encouraging students to name, plan, and attempt concrete tolerant acts.

Unexpected Results, Alternative Explanations, and Robustness

Two unexpected patterns emerged. First, posttest variance increased modestly, potentially indicating that students diversified in the types of actions they planned after the intervention. Second, the very high reliability raises the possibility that some items are closely overlapping in content.

Variance expansion after dialogic interventions is common when students move from convergent recall to divergent planning: structured talk fosters heterogeneous but principled solutions (Bruner, 1996; Mercer & Littleton, 2007). On reliability, measurement scholars caution that alphas approaching .95–.99 sometimes signal redundancy; shortening can preserve precision while reducing fatigue (Streiner, 2003; Tavakol & Dennick, 2011).

Neither pattern undermines efficacy. If anything, the dispersion supports the claim that BHINNECARD stimulates authentic, individualized pathways to tolerant behavior. Still, the next iteration should include an item audit (e.g., inter-item correlations, item response theory) to streamline measurement and a behavioral follow-up (teacher logs or peer nominations) to corroborate self-reports.

Limitations and the Strength of Evidence

The evaluation occurred in a single city context (Yogyakarta) with one school site for effectiveness testing, limiting external validity. Implementation quality likely varied with counselor expertise; although quick-start materials mitigate this, facilitator effects remain plausible. From a standards standpoint, while the physical card stock and guide materials are classroom-ready, additional alignment to national media standards and a printed Rencana Pelaksanaan Layanan (RPL) would benefit scale-up. Finally, outcomes were captured over a short pre–post window; attitudes and planned actions in the tolerance domain often consolidate over longer periods.

These constraints mirror common early-phase R&D trials, which prioritize feasibility and signal detection over generalization (Design-Based Research Collective, 2003). SEL and citizenship programs typically show stronger behavioral transfer under longer exposures and reinforcement cycles (Durlak et al., 2011; Yeager, 2017). Thus, the present results should be viewed as credible first-step evidence, to be extended with multi-site and longitudinal designs.

Despite the constraints, the study demonstrates convergent signals across design feasibility, practicality, measurement integrity, and learning gains—a strong platform for a scaled trial. For decision-makers, the balance of evidence justifies limited adoption with concurrent evaluation, especially where guidance periods can be allocated with fidelity supports.

Theoretical, Practical, and Policy Implications

The results reinforce a synthesis of (a) cognitive–affective design principles from multimedia learning (Mayer, 2021), (b) socio-constructivist accounts of learning through dialogue (Mercer & Littleton, 2007; Vygotsky, 1978), and (c) intergroup contact and perspective-taking mechanisms that underpin tolerance change (Allport, 1954; Pettigrew & Tropp, 2006). BHINNECARD operationalizes these strands by embedding structured prompts that cue contact-like reflection, scaffolded dialogue that reduces ambiguity, and commitment steps that strengthen intention–behavior pathways (Ajzen, 1991).

For counselors, the product can be integrated into a 45–60 minute group session: (1) Briefing (norms and purpose), (2) Board Rush (rapid ideation on a card prompt), (3) Dialogic Deliberation (compare perspectives, surface norms of respect and fairness), (4) Action Planning (one concrete tolerant act to try this week), (5) Reflection & Check-Out. Emphasizing norms of respect and turn-taking helps protect minority voices and ensures psychological safety (Hess & McAvoy, 2015). The leaflet and QR resources can reduce prep time and enhance fidelity.

At the school or district level, BHINNECARD can form part of a structured character education strand focusing on diversity, inclusion, and civic reasoning. Policymakers can support roll-out by (a) funding facilitator training, (b) standardizing physical quality (e.g., ≥310 gsm stock for durability), and (c) mandating a minimal monitoring and evaluation plan (brief pre–post tracking and monthly behavioral check-ins). Given the low cost and short setup time, the intervention aligns well with resource-constrained schools seeking concrete tools for tolerance education.

CONCLUSION

This study set out to develop, validate, and test the effectiveness of BHINNECARD—an educational card game for group guidance—to strengthen junior high school students' tolerance in a culturally diverse Indonesian context; the project's core findings show that (a) expert judgments rated the media highly feasible in design and feasible in content with minor editorial refinements, (b) practicing counselors judged it highly practical for routine school use with only lightweight usability tweaks (quick-start leaflet, stronger visual contrast), (c) the measurement instruments demonstrated excellent psychometric quality (all items valid; very high reliability), and (d) a robust pre–post gain in students' tolerance scores (statistically significant) indicates meaningful instructional impact consistent with socio-constructivist and contact-based learning mechanisms. Theoretically, the study contributes by operationalizing a design-integrated model that fuses multimedia learning principles, dialogic pedagogy, and intergroup contact into a tangible, low-friction medium that advances character education beyond declarative knowledge toward experiential, affective, and behavioral outcomes. Practically, it offers a ready-to-implement tool for school counselors to facilitate structured dialogue, perspective-taking, and action planning within a single 45–60 minute session; and at the policy level, it suggests a scalable, cost-effective pathway for tolerance education through targeted facilitator training, minimal monitoring-and-evaluation routines, and alignment with school character-education strands.

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