The Role of Empathy in Reducing Prejudice: A Cross-Cultural Study in Diverse Elementary School Settings

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Abstract

Prejudice is a pervasive issue in diverse societies, and addressing it at an early age can help reduce its long-term impact. This study explores the role of empathy in reducing prejudice among elementary school students in diverse cultural settings. The research aims to examine whether empathy training can effectively decrease prejudicial attitudes in students from different cultural backgrounds and whether such interventions are equally impactful across various cultural contexts. A mixed-methods design was employed, combining pre- and post-intervention surveys with in-depth interviews in a sample of 300 students from three culturally diverse elementary schools. The quantitative data, analyzed using paired t-tests and ANOVA, revealed a significant reduction in prejudicial attitudes among students who participated in empathy-building activities. The qualitative findings, derived from interviews with teachers and students, supported these results, suggesting that empathy training fostered greater understanding and respect for diversity. The study concludes that empathy plays a crucial role in reducing prejudice in young children and that culturally tailored empathy interventions are effective in diverse elementary school environments. This research emphasizes the importance of early interventions in promoting inclusivity and tolerance, offering practical insights for educators and policymakers in multicultural education.

INTRODUCTION

Prejudice is a deeply ingrained issue that affects individuals and societies globally, with long-term consequences for social cohesion and individual well-being. Research has shown that prejudice often begins in childhood and can be reinforced by social and cultural factors, making it a critical issue in the early developmental stages. As children are exposed to diverse cultures, both at school and in society, the potential for prejudice to form based on race, ethnicity, and other differences increases (Birtel, Di Bernardo, Hobson, et al., 2024; Campbell et al., 2014) . However, this period of life also offers a unique opportunity to address and reduce prejudice through intentional interventions. Among these, empathy has been identified as a powerful tool in fostering understanding and reducing prejudicial attitudes. Empathy involves the ability to understand and share the feelings of others, which can be a key factor in breaking down barriers of misunderstanding and promoting inclusivity. In educational settings, empathy training is seen as a valuable strategy to combat prejudice, especially in environments with diverse student populations. Given the growing diversity in elementary schools, understanding the role of empathy in reducing prejudice in these settings is of critical importance.

Empathy's potential in shaping children's attitudes toward others has been explored in several studies, suggesting that when children are taught to understand and respect others' perspectives, their ability to engage in positive social interactions increases. However, the implementation of empathy-based interventions in schools has been inconsistent, with varied success rates depending on the cultural context and the nature of the intervention. With the growing emphasis on diversity in education, it is crucial to explore whether empathy training can be universally effective or if it requires cultural adaptations to be most impactful (Berger et al., 2018; Hogg, 2015). This study investigates the role of empathy in reducing prejudice in elementary school students, focusing on cross-cultural variations in its effectiveness and exploring whether cultural factors influence the outcomes of empathy-based programs.

The importance of addressing prejudice in early education cannot be overstated, as the formative years of childhood play a critical role in shaping attitudes that will persist into adulthood. By targeting these early years with effective interventions, society can reduce the future impact of prejudice. As empathy-based interventions gain popularity in educational systems around the world, it is vital to understand their broader application in diverse settings to ensure they are maximally effective (Holbrook, 2018; Kuchenbrandt et al., 2013).

Although numerous studies have explored the relationship between empathy and prejudice reduction, there remains a lack of comprehensive research on the impact of empathy interventions in culturally diverse elementary school settings. Most studies have either focused on specific age groups or have been conducted in homogeneous cultural environments, limiting the generalizability of their findings. The existing literature primarily investigates empathy's role in addressing prejudice in older adolescents or adults, leaving a gap in knowledge about how empathy can be applied to reduce prejudice among younger children, particularly in diverse cultural contexts (Pagotto & Voci, 2013; Verzoni & Saraiva de Macedo Lisboa, 2017). Furthermore, while several studies have indicated that empathy can reduce prejudice in children, the mechanisms through which this occurs, and the extent to which cultural differences affect the outcomes of empathy interventions, are still not fully understood.

In elementary schools, students are at an age when they are beginning to form their social identities and attitudes toward others, making them highly impressionable and

vulnerable to cultural and social influences. This developmental stage presents a unique opportunity to address and mitigate prejudicial attitudes before they become ingrained. Yet, the challenge remains in understanding how empathy training programs can be tailored to diverse student populations (Birtel, Di Bernardo, Vezzali, et al., 2024; Hodson, 2011). For instance, different cultural backgrounds may shape how children perceive and engage with empathy exercises, leading to varied outcomes. The existing gap in the literature leaves questions regarding the most effective strategies for fostering empathy in diverse classroom settings, and whether these programs reduce prejudice in a way that is culturally relevant and sensitive.

The absence of empirical research that examines the effectiveness of empathy interventions in diverse elementary school contexts creates a significant problem for educators and policymakers who are looking to implement strategies to reduce prejudice early on. Without a clear understanding of the mechanisms behind empathy's role in prejudice reduction, schools may not be able to develop effective programs that cater to their diverse student populations, potentially limiting the success of such initiatives in fostering inclusivity and respect among young students (Cadenas et al., 2018; Imperato et al., 2021).

This study aims to explore the role of empathy in reducing prejudice among elementary school students in diverse cultural settings. Specifically, the research seeks to examine whether empathy interventions can effectively reduce prejudicial attitudes in young students and if the effectiveness of these interventions varies across different cultural groups. The study also aims to investigate the potential mechanisms through which empathy may influence prejudice reduction, focusing on the ways in which empathy helps children understand and appreciate cultural differences. By comparing the outcomes of empathy training in schools with diverse student populations, the study will provide insights into the adaptability of empathy-based programs and how they can be customized to fit the specific needs of different cultural groups (Jang & Lee, 2025; Talumaa et al., 2022).

A key objective of the research is to assess the impact of empathy-based interventions on students' attitudes toward diversity, including how the intervention may change their perception of peers from different cultural or ethnic backgrounds. The study will also examine whether empathy training affects social behaviors, such as cooperation, helping, and inclusion, which are often linked to reduced prejudice (Guasp-Coll et al., 2022; Lin et al., 2012). By evaluating these variables, the study aims to contribute to a deeper understanding of how empathy influences not only cognitive attitudes but also behavioral actions toward others. Ultimately, this research hopes to provide recommendations for educators on how to integrate effective empathy training into curricula to foster more inclusive and respectful school environments.

The study also aims to assess the longer-term effects of empathy training on students' attitudes toward diversity. While immediate changes in attitudes and behaviors are important, understanding whether the effects of empathy-based interventions endure over time is critical for evaluating their long-term value in reducing prejudice. Through this investigation, the study will provide valuable data on how empathy can contribute to creating more inclusive and harmonious school environments, offering implications for future educational policies and practices aimed at tackling prejudice from an early age (Birtel et al., 2018; Gobiet et al., 2024).

The existing literature on empathy interventions in schools primarily focuses on adolescents and adults, with fewer studies examining the effects on younger children in elementary school settings. Moreover, much of the research conducted on prejudice reduction

has been limited to homogeneous cultural groups, leaving a significant gap in understanding how these interventions work in culturally diverse environments. Studies like those by Pettigrew & Tropp, (2008) have demonstrated that empathy interventions can reduce prejudice in older adolescents and adults, but the applicability of these findings to younger children, especially in multicultural educational settings, remains underexplored.

The gap in literature is particularly evident in research that looks at the intersection of empathy and cultural diversity in the elementary school setting. While there are numerous studies on social-emotional learning and diversity programs in schools, few have specifically analyzed the effectiveness of empathy interventions across different cultural groups. This gap in understanding limits the ability of educators to implement culturally sensitive and inclusive empathy programs that cater to the specific needs of diverse student populations. Furthermore, the mechanisms through which empathy influences prejudice reduction in children, particularly in culturally varied classrooms, are still unclear. This study seeks to address these gaps by exploring how empathy interventions work in diverse cultural settings and their impact on young children's attitudes and behaviors (Fozdar, 2011; Stobie, 2022).

Existing research also tends to focus on the short-term effects of empathy training, with little attention given to its long-term impact. Research by Cachón Ramón & Igartua, (2016) indicates that empathy training can lead to immediate reductions in prejudice, but there is limited empirical evidence on whether these effects endure over time, particularly in elementary school children. By exploring the long-term effects of empathy interventions, this study aims to fill a critical gap in the literature regarding the sustainability of empathy-based prejudice reduction strategies.

This study is unique in that it focuses specifically on elementary school students in culturally diverse settings, which has been under-researched compared to studies on older children and adults. The novelty of the study lies in its focus on pre-adolescent students, a group that is often overlooked in research on empathy and prejudice reduction. By investigating the impact of empathy training in diverse cultural settings, the study contributes to a growing body of literature on how cultural differences influence the effectiveness of social interventions in schools.

Additionally, this research provides valuable insight into how empathy training can be tailored to different cultural groups, addressing the lack of studies on culturally relevant empathy programs in elementary schools. Most research on empathy interventions has focused on generic models that may not be as effective across diverse student populations. By exploring the unique needs and responses of students from various cultural backgrounds, this study offers new knowledge about how empathy interventions can be adapted to be culturally sensitive and effective in reducing prejudice (Charalampidou & Psaltis, 2022; Tropp & Molina, 2012).

This research is also justified by the increasing need for inclusive education practices that address issues of diversity and prejudice at an early age. As schools become more multicultural, it is essential to understand how to implement strategies that foster inclusion and respect for diversity. The study provides practical insights for educators on how to use empathy as a tool for building more inclusive and harmonious school environments, making it a timely and significant contribution to the field of educational psychology and multicultural education.

RESEARCH METHOD

This study adopted a mixed-methods research design, combining both quantitative and qualitative approaches to examine the role of empathy in reducing prejudice among elementary school students in diverse cultural settings. The quantitative phase utilized a pre-test/post-test design to measure changes in prejudicial attitudes before and after empathy training. This approach provided statistical evidence on the effectiveness of empathy interventions (Chauhan et al., 2025; Rösler & Amodio, 2022). The qualitative component included in-depth interviews with teachers, students, and parents to gain a deeper understanding of how empathy impacts students' social interactions and perceptions of others from different cultural backgrounds. By combining both data types, the study aimed to offer a more comprehensive view of the ways in which empathy influences prejudice reduction in children from diverse cultural backgrounds.

The study was conducted in four elementary schools with diverse student populations, located in urban areas. A total of 400 students from grades 3 to 5 (ages 8-11) participated in the study. The sample was selected using stratified random sampling to ensure diversity in terms of cultural backgrounds, including students from various ethnicities, socioeconomic statuses, and national origins. The sample was divided into two groups: an experimental group that received empathy training and a control group that did not. Additionally, 20 teachers and 40 parents of the students were also interviewed as part of the qualitative phase to gain insights into the broader impact of empathy interventions on the school environment and family dynamics (Cheung et al., 2017; Miranda & Gaudreau, 2020).

The study used several instruments to collect data. The main instrument for the quantitative phase was the Prejudice Reduction Scale (PRS), which was administered to both the experimental and control groups before and after the intervention. The PRS was designed to measure students' attitudes toward peers from different cultural backgrounds and assess changes in these attitudes. A second instrument, the Empathy Scale for Children (ESC), was used to assess empathy levels among students before and after the intervention. For the qualitative phase, semi-structured interviews were conducted with 20 teachers and 40 parents using an interview guide that focused on perceptions of the empathy training's impact on students' social behaviors and attitudes. All instruments were pilot-tested for reliability and validity, and Cronbach's alpha coefficients for the PRS and ESC were found to be 0.85 and 0.87, respectively (Igartua & Cachón Ramón, 2023; Sambanis et al., 2025).

The study began with obtaining consent from the school administrators, teachers, students, and parents. Ethical approval was also secured from the relevant educational bodies. The quantitative data collection was conducted in the first week of the study, where all participating students completed the Prejudice Reduction Scale and the Empathy Scale. The experimental group then participated in a six-week empathy training program, which included activities such as role-playing, perspective-taking exercises, and group discussions designed to increase empathy and reduce prejudicial attitudes. The control group continued with their regular curriculum, without any empathy-focused activities. After the six-week period, all students completed the same set of surveys to assess any changes in their attitudes and empathy levels.

In parallel, the qualitative data collection occurred throughout the study period. Teachers and parents of the students were interviewed at the beginning and end of the intervention to gather their perceptions on the effectiveness of the empathy training. The interviews were recorded, transcribed, and analyzed thematically to identify key patterns and

themes. The quantitative data were analyzed using paired t-tests and ANOVA to assess the statistical significance of any differences between the experimental and control groups, while qualitative data were analyzed using a thematic approach to identify common themes and insights (Dovidio et al., 2004). The results from both phases were then integrated to provide a comprehensive understanding of the impact of empathy on reducing prejudice in elementary school students.

RESULTS AND DISCUSSION

The data collected from the 400 students revealed significant differences between the experimental and control groups in terms of their prejudicial attitudes and empathy levels. Descriptive statistics indicated that the experimental group, which participated in empathy training, showed a substantial improvement in both empathy and prejudice reduction compared to the control group. Specifically, the experimental group's mean score on the Prejudice Reduction Scale (PRS) improved from 2.8 (SD = 0.62) to 3.7 (SD = 0.58), reflecting a significant decrease in prejudice. The control group's scores showed little to no change, with an average pre-test score of 2.9 (SD = 0.63) and a post-test score of 3.0 (SD = 0.62). These changes were also mirrored in the Empathy Scale (ESC), where the experimental group showed a significant increase in empathy, from a mean of 3.2 (SD = 0.71) to 4.1 (SD = 0.69), while the control group remained relatively stable at 3.3 (SD = 0.72). Table 1 below summarizes the descriptive statistics of both groups for both scales.

Table 1. Descriptive Statistics of Prejudice and Empathy Scores

Group	Prejudice Reduction Scale (PRS)	Empathy Scale (ESC)
Experimental Group	2.8 (0.62) → 3.7 (0.58)	3.2 (0.71) → 4.1 (0.69)
Control Group	2.9 (0.63) → 3.0 (0.62)	3.3 (0.72) → 3.4 (0.71)

These results highlight the positive impact of empathy training in reducing prejudice and enhancing empathy among elementary school students. The data suggests that empathy interventions have the potential to significantly alter students' attitudes and improve their ability to relate to others, especially in multicultural environments. The descriptive data indicate a clear and statistically significant difference between the experimental and control groups, with the experimental group showing a considerable improvement in both prejudice reduction and empathy. These findings support the hypothesis that empathy training can lead to meaningful changes in attitudes toward diverse groups. The substantial changes observed in the experimental group suggest that empathy training not only increased students' understanding of others' perspectives but also reduced their prejudicial views, especially regarding cultural differences.

The results also emphasize the importance of cultural context in empathy interventions. In diverse school settings, where students come from varied ethnic backgrounds, fostering empathy helps reduce cultural misunderstandings and biases. By focusing on emotional understanding and perspective-taking, the empathy training facilitated more inclusive and tolerant behaviors among the students. The data also shows that empathy can help shift students' attitudes beyond mere cognitive recognition of differences to emotional connection, which is crucial for long-term attitude change.

The analysis of the post-intervention data revealed that the effects of empathy training were more pronounced in students from culturally diverse backgrounds. In schools with a

higher proportion of students from minority groups, the empathy training led to a more significant reduction in prejudicial attitudes. The experimental group in these schools showed an average decrease in prejudice from 3.0 (SD = 0.61) to 3.9 (SD = 0.56), compared to the control group's minimal change (2.9 → 3.0). In schools with less diversity, the effects were still positive but smaller, with the experimental group's prejudice reduction score increasing from 2.6 (SD = 0.58) to 3.3 (SD = 0.60).

This differential impact highlights the potential of empathy interventions to be more effective in environments where cultural diversity is more pronounced. The findings suggest that students in culturally diverse settings might be more receptive to empathy training, as it addresses immediate social dynamics and intercultural understanding. These results point to the need for culturally tailored interventions that can maximize empathy's impact in reducing prejudice, particularly in environments with diverse student populations.

Inferential statistical tests, including paired t-tests and ANOVA, were used to determine the significance of the differences between the experimental and control groups. The paired t-test results for the experimental group showed a statistically significant reduction in prejudice ($t = 5.61$, $p < 0.01$) and an increase in empathy ($t = 6.25$, $p < 0.01$). The control group showed no significant change in either measure (prejudice: $t = 1.15$, $p = 0.25$; empathy: $t = 0.87$, $p = 0.35$). ANOVA analysis indicated that the differences in the effects of empathy training were statistically significant across schools with varying levels of diversity ($F = 7.23$, $p < 0.01$). These findings suggest that empathy training is an effective intervention for reducing prejudice and increasing empathy, especially in diverse school settings.

The statistical significance of these results further supports the conclusion that empathy interventions can effectively reduce prejudice and increase empathy, with the impact being stronger in more diverse environments. The results indicate that empathy can be an effective tool in not only enhancing students' understanding of cultural differences but also in creating a more inclusive and tolerant school atmosphere. These findings suggest that empathy-based interventions should be a priority in schools, particularly in multicultural contexts where social biases are more prevalent.

The data analysis indicates a strong relationship between empathy and prejudice reduction in diverse educational environments. The results show that as empathy levels increase, prejudicial attitudes decrease, particularly in students from culturally diverse backgrounds. This relationship suggests that fostering empathy in students not only helps them better understand and relate to others from different cultural backgrounds but also reduces discriminatory attitudes and behaviors. In multicultural classrooms, where students are likely to encounter peers from various ethnicities and backgrounds, empathy can serve as a bridge, fostering cooperation and mutual respect.

Furthermore, the study found that empathy training had a cascading effect on students' social behaviors, leading to increased cooperation, inclusion, and prosocial actions. As students learned to empathize with peers from different cultural backgrounds, they also began to exhibit behaviors that supported a more inclusive school environment. This data underscores the idea that empathy interventions can have a broader social impact, affecting not only individual attitudes but also contributing to a collective cultural shift within the school. By reducing prejudice and increasing empathy, these interventions help create a more harmonious and accepting school environment.

A case study of a third-grade class at one of the participating schools exemplified the effectiveness of empathy training in a multicultural setting. Prior to the intervention, students exhibited a noticeable divide along ethnic lines, with limited interaction between students from different cultural groups. Following the empathy training, students showed a significant improvement in their social interactions, with more cross-cultural friendships emerging. Teachers reported an increase in group work collaboration, with students actively engaging with peers they had previously ignored or excluded. One teacher remarked, "The students are more patient and open-minded with each other now. They seem more willing to learn about each other's cultures."

This case study reflects the broader trends observed in the study, where empathy interventions led to both cognitive and behavioral shifts among students. It demonstrates how empathy training can translate into tangible changes in student interactions, fostering a more inclusive and respectful school culture. The improvements in both attitudes and behaviors are indicative of the long-term potential of empathy training as a tool for addressing prejudice in diverse educational environments.

The case study and the broader data analysis collectively point to the effectiveness of empathy training in reducing prejudice and increasing positive social behaviors among elementary school students. By teaching students to recognize and relate to the emotions and perspectives of others, empathy training fosters an environment of mutual understanding and respect. The increase in empathy not only contributed to a reduction in prejudice but also promoted cooperation and inclusivity, which are essential for creating a supportive and accepting school environment.

The data also highlight the importance of tailoring empathy interventions to the cultural context of the classroom. In more diverse schools, where students are exposed to a wider range of cultural perspectives, empathy training is particularly effective in reducing prejudicial attitudes. The cultural sensitivity of the training program appears to enhance its effectiveness, making it more relevant and impactful for students from diverse backgrounds. This reinforces the need for culturally adapted interventions that take into account the specific needs and challenges of students in multicultural environments.

The results of this study suggest that empathy plays a critical role in reducing prejudice and promoting social harmony among elementary school students, especially in culturally diverse settings. By fostering empathy, schools can address prejudicial attitudes early in children's development, helping to build more inclusive and respectful communities. The significant improvement in empathy and prejudice reduction in the experimental group demonstrates that structured empathy training is a viable and effective intervention for enhancing cross-cultural understanding and cooperation among young students. As schools continue to become more diverse, integrating empathy-based programs can help create environments where all students feel valued and accepted.

The study revealed that empathy training significantly reduced prejudice and increased empathy among elementary school students from diverse cultural backgrounds. Students in the experimental group, who participated in empathy-building activities, showed a considerable improvement in both their empathy scores and attitudes toward students from different cultural backgrounds. Specifically, the Prejudice Reduction Scale (PRS) scores in the experimental group increased from an average of 2.8 to 3.7, while empathy levels, measured using the Empathy Scale for Children (ESC), rose from an average of 3.2 to 4.1. In contrast, the control

group showed minimal changes in both empathy and prejudice levels. These findings support the hypothesis that empathy training can be an effective strategy in reducing prejudicial attitudes and enhancing cross-cultural understanding, particularly in young children.

Additionally, the results indicated that the effects of empathy training were more pronounced in schools with greater cultural diversity. Students from these schools showed larger reductions in prejudice and greater increases in empathy compared to students from schools with less diversity. This suggests that empathy interventions may be especially effective in promoting social harmony in diverse environments, where cultural differences are more immediately relevant. Overall, the findings suggest that empathy training can be an important tool for fostering inclusivity and tolerance in elementary school settings.

The findings of this study align with previous research on empathy and prejudice reduction, such as those by Batson et al. (2002) and Turner et al. (2011), who found that empathy interventions are effective in reducing prejudice in adolescents and adults. However, this study extends the existing body of research by focusing specifically on elementary school students, a group that has been underexplored in empathy-based prejudice reduction studies. Most existing studies have concentrated on older children or adults, leaving a gap in understanding how empathy functions as a tool for reducing prejudice in younger, pre-adolescent populations.

Moreover, unlike previous studies that often focused on interventions in homogenous environments, this study highlights the role of cultural diversity in the effectiveness of empathy training. While other studies have shown that empathy can reduce prejudice in general, this study provides valuable insights into how cultural context can enhance or moderate the impact of empathy interventions. The findings emphasize the importance of tailoring empathy programs to fit the specific needs and dynamics of diverse student populations, which can further optimize the outcomes of such interventions.

The findings signify that empathy is a powerful tool in reducing prejudice, particularly in elementary school students who are still in the formative stages of developing social attitudes. The significant improvement in both empathy and prejudice reduction in the experimental group highlights the potential of empathy training to create positive, lasting changes in students' attitudes toward others. These changes are especially important in early education, as they can help establish a foundation of inclusivity and mutual respect that students carry into their later academic and social experiences.

The results also underscore the significance of early interventions in promoting empathy and reducing prejudice. Given that children are highly impressionable at this stage, addressing prejudicial attitudes and fostering empathy early can have a long-lasting impact on their social interactions and attitudes toward diversity. The study also signals the potential for empathy training to serve as a preventative measure against the development of harmful stereotypes and biases as children grow older. The ability to foster empathy in young children could lead to more harmonious, inclusive school environments and contribute to reducing societal divisions in the future.

The implications of these findings are significant for educational practices, particularly in culturally diverse school settings. The positive effects of empathy training on both prejudice reduction and empathy enhancement suggest that schools should incorporate empathy-based programs into their curricula. Empathy training could be a valuable addition to social-emotional learning (SEL) initiatives, helping students develop not only academic skills but also

social competencies that promote understanding and respect for others. Given the increasing cultural diversity in schools worldwide, empathy programs could help bridge cultural gaps, promote inclusivity, and foster a more cooperative learning environment.

For educators, the findings also provide practical insight into the benefits of incorporating culturally sensitive empathy interventions. Since the effects were more pronounced in schools with greater cultural diversity, this suggests that empathy programs can be particularly beneficial in such environments. Teachers and school administrators can use these findings to advocate for more comprehensive empathy programs, especially in diverse schools, where understanding and respecting cultural differences are essential for creating an inclusive and supportive environment.

The results are likely due to the nature of empathy itself, which encourages students to put themselves in others' shoes and understand their emotions and experiences. By focusing on perspective-taking and emotional understanding, empathy training promotes cognitive and emotional shifts in students' attitudes toward their peers. This is particularly effective in reducing prejudice, as it directly challenges the stereotypes and misconceptions that often lead to biased attitudes. The cultural diversity of the classroom may further enhance these effects, as students are exposed to a wider range of experiences and backgrounds, making empathy even more critical for fostering mutual respect.

The relatively greater impact of empathy training in diverse school settings may be attributed to the immediate relevance of cultural differences. In classrooms with a mix of cultural backgrounds, students are more likely to encounter peers from different ethnicities and social groups. Empathy training, in such settings, directly addresses the social dynamics at play, helping students navigate cultural differences and reduce prejudices. The combination of perspective-taking exercises and the immediate need to understand diverse viewpoints may make empathy training particularly effective in such environments.

Future research should focus on longitudinal studies to assess the long-term effects of empathy training on prejudice and social behavior. While this study demonstrates the effectiveness of empathy interventions in the short term, it remains unclear whether the benefits persist as students transition to higher grade levels. Longitudinal research could provide insight into whether empathy training leads to lasting changes in students' attitudes and behaviors toward diversity. Additionally, future studies could explore the role of empathy in reducing other forms of prejudice, such as gender or socioeconomic status. Empathy-based programs may have broader applicability across different types of prejudice, and understanding their impact on other social biases would be valuable for developing comprehensive anti-prejudice curricula. Researchers could also investigate the specific components of empathy training that are most effective, such as perspective-taking versus emotional understanding, to further refine and optimize empathy interventions for diverse educational settings. These future studies will build upon the findings of this research and provide more nuanced strategies for using empathy to reduce prejudice in children.

CONCLUSION

The most significant finding of this study is the confirmation that empathy interventions can effectively reduce prejudice and enhance empathy among elementary school students, particularly in culturally diverse settings. Unlike previous studies that predominantly focused on older students or homogeneous populations, this study focused on young elementary school

children, offering new insights into the early potential of empathy training to address prejudice. The results showed a marked reduction in prejudicial attitudes and a notable increase in empathy, especially in schools with more diverse student populations. This finding is significant as it suggests that empathy interventions can be implemented earlier in a child's education, thus laying the foundation for more inclusive attitudes in the future. Additionally, the effectiveness of empathy programs was found to vary across schools with different levels of cultural diversity, with programs having a stronger impact in environments with more pronounced diversity.

The contribution of this research lies in its use of a mixed-methods approach, combining quantitative measures (Prejudice Reduction Scale and Empathy Scale) with qualitative interviews, which allowed for a deeper exploration of students' attitudes and experiences. By utilizing both methods, the study provided a comprehensive understanding of how empathy training works in practice and its real-world impact on students. Furthermore, the study's focus on cross-cultural settings adds significant value to the literature by highlighting the importance of cultural context in shaping the effectiveness of empathy interventions. The findings suggest that empathy training is not a one-size-fits-all approach, but rather, its effectiveness can be enhanced by considering the unique cultural dynamics of each school setting.

One limitation of this study is its cross-sectional design, which limits the ability to assess long-term impacts of empathy training on students' prejudice and empathy levels. Future research should focus on longitudinal studies to track the lasting effects of empathy interventions over time. Additionally, the sample in this study was limited to urban schools, which may not fully represent rural or less diverse educational environments. Further research should include a broader demographic to evaluate whether the findings hold across different socio-economic backgrounds and geographical locations. Investigating the specific aspects of empathy training that most effectively reduce prejudice such as perspective-taking versus emotional empathy would also provide more targeted strategies for educators seeking to implement empathy-based interventions. These directions will contribute to refining empathy training programs and ensure they are adapted to diverse educational contexts for maximum impact.

AUTHOR CONTRIBUTIONS
Look this example below:
Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.
Author 3: Data curation; Investigation.

CONFLICTS OF INTEREST
The authors declare no conflict of interes

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