

Reducing Racial Bias Toward South Asian Peers: A Classroom-Based Intervention for Chinese Preschoolers in Hong Kong

Yau Yu Chan¹⁾

Nirmala Rao

The University of Hong Kong

Abstract

In Hong Kong, minority South Asian students experience social exclusion in mainstream classrooms, which lowers their school engagement and performance. This study investigated the effectiveness of a classroom-based intervention in reducing Chinese children's anti-South Asian bias and increasing their socialising preference for South Asian children. A quasi-experiment was conducted with 43 Chinese kindergarten children (intervention group: 22 children, $M_{age} = 54.14$ months; control group: 21 children, $M_{age} = 54.67$ months) and their parents. Children completed direct assessments on racial attitudes and socialising preferences while their parents provided sociodemographic information. Children in the intervention group were told a story concerning diversity and inclusion, followed by discussion and explicit teaching regarding respecting and accepting diverse groups. Cooperative learning activities that promote the interactions between Chinese and South Asian children were also organised. For the control group, a story irrelevant to the topic of interest was told. After controlling for sociodemographic factors, a two-way Analysis of Covariance revealed a significant Group X Time interaction effect on racial attitudes. Follow-up tests showed that children in the intervention group scored significantly lower than those in the control group in post-intervention anti-South Asian bias.

Keywords : *social inclusion, minority education, intervention, South Asian, Hong Kong*

Corresponding author, ¹⁾ chanyauyu2@gmail.com

Hong Kong has positioned itself as Asia's world city, which is an open, tolerant, and pluralistic community. However, minority students face prejudice and discrimination in mainstream classrooms. Ethnic minorities make up approximately 8% of the Hong Kong population (Census and Statistics Department, 2022). After excluding groups of Filipinos and Indonesians who generally work as domestic helpers, South Asians are the largest ethnic group (Census and Statistics Department, 2022). According to the latest population census, the size of the South Asian population in Hong Kong was 101,969 in 2021 including Indians (42%; population size: 42,569), Pakistanis (24%; population size: 24,385), Nepalese (29%; population size: 29,701), and others, including Bangladeshis and Sri-Lankans (5%; population size: 5,314) (Census and Statistics Department, 2022). Despite their long-standing presence, dating back to colonial times, many South Asians today face socioeconomic disadvantage, linguistic barriers, and discrimination in educational and occupational domains (Cheung & Chou, 2017; Crabtree & Wong, 2013). In educational settings, prejudice and discrimination can lead to psychological distress and low school engagement, thereby affecting academic performance (Nishina et al., 2019). While previous studies in Euro-American contexts have examined the importance of minority students' positive mental health in achieving success in educational settings (Goforth & Pham, 2023), most existing research on the development of South Asian students in Hong Kong focuses on their short-term academic failure (e.g., Li & Chuk, 2015; Shum et al., 2011). Against this background, this study focuses on the well-being and inclusion of South Asian children in early childhood classrooms.

This study focuses specifically on promoting South Asian kindergarten children's inclusion in mainstream classrooms by reducing Chinese children's racial prejudice and promoting their socialising preference for South Asian children. We targeted Chinese children as they are the dominant social group. Prior research suggests that children from majority groups often exhibit stronger in-group bias and are key agents in inclusive or exclusive peer dynamics (Verkuyten, 2022). Focusing on Chinese children, we aimed to assess how the classroom-based intervention might reduce bias and promote inclusive social behaviour in this influential group. The findings of this intervention study can add to existing literature since there is a paucity of interventions that promote the social inclusion of

immigrant and minority children in preschools (Keles et al., 2021). Modern societies have experienced a demographic shift and cultural diversity through increasing geographical mobility, and there are many minority students in mainstream classrooms. The successful integration of minority children into society has far-reaching consequences and is vital for social policy discussions.

Preschoolers' Implicit Racial Bias and Socialising Preferences

In recent years, scholars have increasingly recognised that racial bias emerges early in childhood, often before children can explicitly articulate race-related beliefs. Among preschool-aged children, implicit racial bias refers to unconscious associations or evaluative tendencies toward individuals of different racial groups, typically inferred through nonverbal behaviours, choices, and social preferences rather than self-report (Meltzoff & Gilliam, 2024; Qian et al., 2016). This bias is closely linked to children's socialising preferences, which reflect their tendencies to choose certain peers over others for social interaction and friendship (Chen et al., 2018).

Research shows that children as young as three years can categorise others by race, and by ages four to five, they begin to display consistent in-group preferences in both social and learning contexts (Chen et al., 2018; Halbeisen et al., 2017). These preferences manifest not only as implicit positive associations with same-race peers but also as selective social engagement, where children prefer to interact, play, and learn with peers who share their racial background (Mills, 2013). Such socialising preferences reinforce in-group cohesion but also contribute to the exclusion of outgroup peers, shaping early peer dynamics and experiences. For instance, Chen et al. (2018) found that four-year-old Chinese kindergarten children in Hong Kong demonstrated a marked preference for learning from and socialising with other Chinese children over non-Chinese peers. This preference was especially pronounced when the outgroup peers were South Asian, highlighting the salience of ethnic boundaries in children's social worlds. These findings suggest that young children internalise broader societal and cultural hierarchies, which are modelled through parental attitudes,

media portrayals, and institutional practices (Bisin & Verdier, 2011). Consequently, South Asian children in Hong Kong often experience exclusion and ridicule from Chinese classmates due to perceived linguistic and cultural differences (Shum et al., 2011).

Despite growing evidence of early-emerging racial biases, significant gaps remain in our understanding of how preschoolers form and apply these biases. Research has shown that young children are capable of generalising attitudes across racial categories, often applying stereotypes formed about one individual to others who share similar racial features (Kinzler & Dautel, 2012). However, the extent of such generalisation—and the cognitive mechanisms driving it—remains underexplored. Studies suggest that children are sensitive to visible cues such as skin colour, language, and accent, which they may use as heuristics for group membership and social worth (Kinzler, 2020). Nevertheless, it is unclear how consistently children apply these cues across diverse racial contexts. This study addresses these gaps by exploring how Chinese preschoolers in Hong Kong respond to and engage with South Asian peers, shedding light on young children's sensitivity to racial group boundaries and their capacity for change through structured social interventions.

Conceptual Framework

The design of the intervention in this study was guided by two complementary theoretical traditions: anti-bias theory and contact theory. Together, these frameworks inform the rationale and structure of the intervention. They offer cognitive and social pathways for addressing bias and promoting inclusion among young children.

Anti-bias theory is rooted in socio-cognitive perspectives and emphasises direct exposure to content that challenges stereotypes and promotes equity across social groups (Aboud et al., 2012). Anti-bias education, as conceptualised by Derman-Sparks and Edwards (2010), advances the notion that even young children can identify unfairness and, with appropriate guidance, begin to question and reject discriminatory attitudes. Importantly, this approach calls for a sustained, program-wide commitment and aims to cultivate children's sense of identity, appreciation of diversity, understanding of justice, and capacity for activism.

However, attitudinal change alone may not be sufficient. Anti-bias interventions can be significantly strengthened by drawing on principles of contact theory (Allport, 1954), which highlights the importance of meaningful and sustained intergroup interactions in reducing prejudice. While anti-bias theory focuses on the internal processes of belief revision, contact theory provides a complementary external mechanism—structured intergroup engagement—to reinforce and contextualise these shifts. Originally developed for adult settings, contact theory has since been adapted for use in early childhood education, particularly through practices like cooperative learning, where children collaborate toward shared goals in diverse peer groups (Pettigrew & Tropp, 2005).

Building on this foundation, Allport's original conditions for optimal contact—equal status, common goals, cooperation, and institutional support—remain central but have been critically refined in more recent research (Pettigrew & Tropp, 2005). Contemporary studies emphasise not only the presence of these conditions but also the quality, consistency, and context of intergroup interactions (Pettigrew & Tropp, 2005). These refinements are particularly relevant in early childhood classrooms, where educators play a pivotal role in intentionally shaping learning environments that foster inclusive peer dynamics and sustained intergroup engagement.

Intervention Programmes to Reduce Implicit Bias in Early Childhood Education

Building on the seminal work of Katz and Zalk (1978), intervention programmes that promote inclusion have largely been informed by anti-bias theory and contact theory (Aboud et al., 2012). These frameworks have led to a range of strategies targeting both cognitive and social mechanisms underlying bias.

Recent reviews of anti-bias interventions for children under six highlight four primary approaches: perceptual individuation training, media-based exposure, mentalising interventions, and intergroup contact (Slobodin et al., 2023). Most of these interventions were found to effectively reduce racial bias, suggesting that even very young children are

responsive to developmentally appropriate strategies (Qian et al., 2019).

One widely used strategy in early childhood anti-bias education is story-based intervention, which introduces concepts of diversity and inclusion through picture books featuring characters from varied racial and cultural backgrounds. These interventions are most effective when paired with guided discussions facilitated by adults who help scaffold children's understanding and emotional engagement (Nguyen, 2022). Research has shown that when facilitated well, children are capable of participating in thoughtful discussions on complex social issues, including race, gender norms, and injustice. For instance, a qualitative study conducted in a predominantly White public kindergarten classroom found that young children could engage meaningfully with anti-bias picture books and express nuanced understandings of race and gender (Nguyen, 2022). However, it also highlighted that children needed substantial support to move from awareness to activism (Kissinger, 2017). This underscores the critical role of teachers in establishing a supportive classroom climate and delivering consistent, developmentally appropriate anti-bias messages (Derman-Sparks et al., 2015). Without adequate training and reflexivity, educators may miss opportunities to interrupt bias or unintentionally reinforce harmful narratives.

Another key component of effective anti-bias education is cooperative learning, which aligns with principles of contact theory. Research shows that structured intergroup contact—where children from different backgrounds collaborate under conditions of equal status and shared goals—can reduce prejudice and promote inclusive peer relationships (van Ryzin & Roeth, 2018; Pettigrew & Tropp, 2005). Studies highlight that cooperative learning is associated with more caring peer interactions and a greater willingness to engage across group lines, compared to individualistic or competitive classroom structures (Liebkind et al., 2019). However, the success of such activities depends on intentional group composition, well-designed tasks, and teacher facilitation that ensures all children contribute meaningfully (Grütter et al., 2018; Rastogi & Juvonen, 2019).

Despite promising outcomes, existing interventions often focus on either attitudes (e.g., bias reduction) or behaviours (e.g., peer inclusion), but rarely both. Few programmes adopt an integrated approach that simultaneously targets the cognitive and social processes underlying racial bias. This study addresses that gap by implementing a dual-component

classroom intervention that combines anti-bias storytelling with structured cooperative learning. Grounded in a holistic conceptual framework, the intervention is informed by two complementary theories that address both individual attitudes and social behaviours, making them especially well-suited to early childhood contexts. By engaging children cognitively and emotionally through reflective storytelling and discussion, and socially through guided intergroup collaboration, this intervention aims to reduce implicit racial bias toward South Asian peers while fostering more inclusive peer preferences among Chinese preschoolers.

The Current Study

This study examined the effectiveness of a classroom-based intervention in promoting the inclusion of South Asian children in mainstream classrooms in Hong Kong. There are two research questions: (1) How does the intervention impact Chinese children's attitudes toward South Asian children? (2) How does the intervention impact Chinese children's socialising preferences? We predicted that children who received the intervention would have more positive attitudes towards South Asian children and a higher preference to socialise with South Asian children than children in the control group.

Method

Participants

A quasi-experimental design with class as the unit of randomisation was used to evaluate the effectiveness of the intervention. We purposively selected one local kindergarten admitting both Chinese and South Asian children in a community inhabited by Chinese residents. We invited Chinese children from two Kindergarten 2 classes (denoted as K2A and K2B) to participate in this study. In K2A, there are 28 children (26 Chinese and 2 South Asians), while there are 27 children (25 Chinese and 2 South Asians) in K2B. A total of 43

Table 1. *Descriptive Statistics of Sociodemographics by Group Status*

	Intervention (<i>N</i> = 22)		Control (<i>N</i> = 21)	
	<i>M/N</i>	<i>SD/%</i>	<i>M/N</i>	<i>SD/%</i>
Child's age (in months)	54.14	1.781	54.67	1.278
Child's sex				
Boy	9	40.9%	10	47.6%
Girl	13	59.1%	11	52.4%
Child's native languages				
Chinese	22	100%	21	100%
Others	0	---	0	---
Race of child's closet friend				
Chinese	22	100%	21	100%
Others	0	---	0	---
Family racial composition				
All Chinese	21	95.5%	21	100%
Presence of non-Chinese	1	4.5%	21	---
Monthly household income (in HKD)	26590	9998	26904	8926
Parent's education level				
High school	18	81.8%	16	76.2%
Diploma/ certificate/ associate degree				
Bachelor's degree	3	13.6%	5	23.8%
Master's degree or above	1	4.5%	0	---
Presence of domestic helper				
Presence	4	18.2%	5	23.8%
Absence	18	81.8%	16	76.2%

(21 from K2A and 22 from K2B) four-year-old Chinese children and their parents participated in this study. Participating children from the two classes were randomly assigned to either the intervention (i.e., K2B: 9 boys and 13 girls; $M_{\text{age}} = 54.14$ months, $SD = 1.781$ months) or the control group (i.e., K2A: 10 boys and 11 girls; $M_{\text{age}} = 54.67$ months, $SD = 1.278$ months) by tossing a coin, and they were blind to the allocation status. Informed consent was obtained from the kindergarten and parents, and ethical approval was obtained from the Human Research Ethics Committee of the authors' institution. Table 1 presents the sociodemographic information of participants by group status.

Measures

Participating children's racial attitudes and socialising preferences were examined before and after the intervention. There were two child direct assessments.

Racial Attitude

We used the Preschool Racial Attitude Measure II (PRAM II) (Williams et al., 1975) to examine children's racial attitudes. Although the PRAM II was originally developed several decades ago, it remains widely cited and has been successfully adapted in numerous studies on young children's racial attitudes (e.g., Katz, 2020; Shutts et al., 2011). In this study, we updated the PRAM II to reflect the contemporary Hong Kong context by using current photographs of children and revising adjective lists for age appropriateness. The adapted measure demonstrated acceptable internal consistency in our sample (Cronbach's $\alpha = .85$), supporting its reliability and utility in capturing young children's evaluative tendencies in a nonverbal, developmentally appropriate format.

In each question, we presented photographs of a pair of Chinese and South Asian children of the same gender as the target child. We asked the target child who is more likely to possess specific attributes, including 12 positive and 12 negative evaluative adjectives. All the pictures presented were matched on attractiveness and distinctiveness in ratings provided by 10 postgraduate students. For positive attributes, one sample question is to tell a story about a "kind" boy who saved a kitten from drowning, and asks the target child who the kind boy

is. The target child has to point to a picture of either the Chinese or the South Asian child. The other positive evaluative adjectives include clean, pretty, wonderful, good, smart, nice, friendly, helpful, healthy, right, and happy. For the negative evaluative adjectives, one sample question is to tell a story about an “unfriendly” child who does not speak to any children playing in the playground, and ask the target child who the unfriendly child is. The other negative evaluative adjectives are ugly, wrong, bad, sad, stupid, selfish, naughty, cruel, mean, unfriendly, dirty, and sick. For questions with positive evaluative adjectives, one point was given for the selection of the Chinese child, indicating pro-Chinese or anti-South Asian bias, that Chinese children possess certain positive attributes. For questions with negative evaluative adjectives, one point was given for the selection of a South Asian child, indicating pro-Chinese or anti-South Asian bias that South Asian children possess certain negative attributes (Williams et al., 1975). A score ranging from 0 to 24 was generated, with lower scores indicative of pro-South Asian or anti-Chinese (S+ / C-) bias and higher scores indicative of pro-Chinese or anti-South Asian (C+ / S-) bias (Williams et al., 1975). A score around 12 indicates no consistent racial bias.

Socialising Preference

The Socialising Preferences Task used in this study was adapted from the one developed by Chen et al. (2018), validated in a group of Chinese children in Hong Kong. This task has demonstrated sensitivity in detecting children’s social preferences across ethnic groups in prior local research, supporting its contextual appropriateness. The task consisted of 8 trials. In each trial, the target child was shown photographs of a Chinese and a South Asian child, matched to the target child’s gender and approximate age. The same photographs were used as in the Racial Attitude task to ensure consistency. In the first four trials, a novel object (e.g., a black plunger piece, a yellow plastic attachment, a white pool pipe, or a wooden juicer) was presented alongside the images, and the child was asked which peer they would like to play with using that object. These unfamiliar but neutral objects were selected to minimise biases from object familiarity or specific play-based associations. Their purpose was to create an open-ended play context that prompts social choice, rather than to assess toy preference. In the remaining four trials, children were asked questions about social sharing or affiliative

intentions (e.g., “If you have a secret, who would you want to share it with?”). The child responded in each trial by pointing to either the Chinese or South Asian child. For each trial, a score of 1 was assigned if the child chose the Chinese peer. The total score ranged from 0 to 8, with lower scores indicating a stronger socialising preference for South Asian peers. To assess internal consistency, Cronbach’s alpha for the full 8-item task was calculated and found to be acceptable ($\alpha = .78$), supporting the measure’s reliability for use with preschoolers in this context.

Sociodemographics

Parents completed a questionnaire to provide information regarding child’s age, child’s native language (1 = *Chinese*, 2 = *Others*), the race of child’s closest friend (1 = *Chinese*, 2 = *Others*), family racial composition (1 = *all Chinese*, 2 = *presence of non-Chinese*), monthly domestic household income, parent’s education level (1 = *middle school or below*, 2 = *high school*, 3 = *diploma/ certificate/ associate degree*, 4 = *Bachelor’s degree*, 5 = *Master’s degree or above*), and presence of domestic helpers (1 = *presence*, 2 = *absence*). The presence of domestic helpers was included as a variable due to its potential relevance in shaping children’s racial attitudes. In Hong Kong, many domestic helpers come from South or Southeast Asia, and their regular interaction with children may influence children’s exposure to ethnic diversity and affect their social preferences toward outgroup members.

Procedure

The intervention was carried out in December 2023. Participating children completed a pretest on racial attitudes and socialising preferences in the kindergarten they attend, one week before the intervention. The tests took approximately 10 minutes. Their parents provided sociodemographic information. The survey took them around 5 minutes to complete. The classroom-based interventions for the intervention and the control groups took place in children’s classrooms on separate days of the same week. They were implemented by the same qualified kindergarten teacher recruited and trained by the first author. For the intervention group, the teacher first did some ice-breaking activities with children and then

told the story “Is That Rainbowsaurus So Different From Us?” published by the Ministry of Social and Family Development of Singapore to help promote inclusion in classrooms. This story is based on Article 2 of the United Nations Convention on the Rights of the Child, which states that children must not suffer discrimination regarding their origins, including race and colour. The storytelling time was around 10 minutes, followed by a 15-minute follow-up discussion on classroom-inclusive practices with children. During the discussion, the teacher explicitly pointed out to the students that everyone is different and highlighted the importance of respecting diversity and playing with children of all races. The storytelling component aimed to support the core goals of identity and diversity within the anti-bias education framework (Derman-Sparks & Edwards, 2010) by presenting children with inclusive narratives featuring both Chinese and South Asian characters in positive and relatable roles. Guided discussions encouraged children to explore similarities and differences among people, helping to lay a foundation for respectful intergroup understanding.

After the children’s snack time, which lasted for 30 minutes, the teacher arranged cooperative learning activities called “Numbered Heads Together”, in which children were divided into four groups (each group with 5 to 6 members) to discuss specific topics. There were three rounds of discussion on topics surrounding children’s favourite colour, food, and toys. During the three rounds, the teacher intentionally constructed different groups and ensured that all Chinese children had a chance to be with the two South Asian children. In each round, every member of a group was assigned a number. When the discussion time was up, the teacher would call a number, and the students with that number in all groups needed to stand up and share their group’s discussion results. The teacher stressed the importance of contribution by every group member because every one of them had a chance of being picked and sharing the discussion results with the other groups. The cooperative learning activity aimed to support the core goals of justice and activism within the anti-bias education framework (Derman-Sparks & Edwards, 2010) by creating opportunities for Chinese and South Asian children to work together as equals in a shared task. The intentional inclusion of at least one South Asian peer in each group allowed children to practice inclusive social behaviours in a structured, supportive setting. Although the intervention did not explicitly

frame these interactions in terms of social justice, it provided a developmentally appropriate context for fostering inclusive peer norms.

For the control group, the teacher told another story, “Elvis and the Feathers School of Music”, from the same series of books published by the Ministry. The story is based on Article 6 of the UN Convention, touching on children’s right to survival and development. The storytelling time was around 10 minutes, followed by a 15-minute follow-up discussion with the children. A post-test on racial attitudes and socialising preferences was conducted one week after the intervention to allow a short period for potential reflection and consolidation of learning, while still capturing the immediate effects of the activity before longer-term influences could take hold.

Data Analysis

We used SPSS software (version 29) to perform the analyses, with .05 as the conventional level of significance. Intention-to-treat analysis was used to process the data. Missing data was estimated by multiple imputations (5 imputations). We first calculated descriptive statistics on the sociodemographics and outcome variables (i.e., racial attitudes and socialising preferences) by group status. To establish baseline equivalence, we conducted one-way ANOVAs to test for pre-intervention differences in racial attitudes and socialising preferences between the intervention and control groups. Next, we conducted a two-way Analysis of Covariance (ANCOVA) to examine the main effects of group status (i.e., intervention vs. control group) and time (i.e., pre- vs post-intervention) and their interaction effects on racial attitudes and socialising preferences, controlling for differences in sociodemographic variables at baseline. Follow-up analyses were conducted if necessary. The effect sizes of the significance, with .01, .06, and .14 of η^2p representing small, medium, and large effect sizes, would be considered (Richardson, 2011).

Results

Table 2 shows the means and standard deviations of outcomes by group status. Results showed that Chinese children in both the intervention and the control group had high anti-South Asian bias and low socialising preference for South Asian children. We conducted one-way ANOVAs to determine whether the intervention and control groups differed in racial attitudes and socialising preferences prior to the intervention. The results showed no significant group differences in baseline racial attitudes, $F(1, 41) = 1.23, p = .271, \eta^2p = .016$, or socialising preferences, $F(1, 41) = 0.84, p = .362, \eta^2p = .011$, showing the two groups were comparable before the intervention. We then conducted two-way ANCOVAs to examine group and time differences in racial attitude and socialising preference, controlling for the child's gender, monthly household income, parents' education level, and the presence of domestic helpers.

The Group X Time interaction on racial attitude was significant, $F(1, 3.564) = 25.421, p = .043, \eta^2p = .044$. Follow-up one-way ANCOVA indicated that the intervention group ($M = 15.18, SD = 2.805$) scored significantly lower than the control group ($M = 16.81, SD = 3.172$) in post-intervention racial attitudes, $F(1, 3.752) = 29.416, p = .040, \eta^2p = .092$, revealing a medium effect size. Regarding racial attitude, there was a significant main effect of Time, $F(1, 4.562) = 32.537, p = .036, \eta^2p = .055$. The main effect of Group, $F(1, 1.932) = 6.647, p = .023, \eta^2p = .012$ was not significant. There were no significant main effects or interaction

Table 2. *Descriptive Statistics of Outcomes by Group Status*

	Range	Intervention (<i>N</i> = 22)		Control (<i>N</i> = 21)	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Pre-intervention					
Racial attitude	0-24	17.5	3.113	16.95	3.278
Socialising preference	0-8	6.82	1.053	6.86	0.964
Post-intervention					
Racial attitude	0-24	15.18	2.805	16.81	3.172
Socialising preference	0-8	6.64	0.953	7.01	1.021

effects for socialising preference.

Discussion

This study evaluated the effectiveness of a classroom-based intervention in promoting South Asian children's inclusion in mainstream schools, as indicated by Chinese children's attitudes towards South Asian children and socialising preferences. In support of our hypothesis, Chinese children in the intervention group had lower anti-South Asian bias than those in the control group at the post-intervention phase, demonstrating the effectiveness of the intervention. Contrary to our hypothesis, the intervention and the control group had no significant difference in post-intervention socialising preferences.

Chinese Children's High Racial Bias and Low Socialising Preference for South Asian Children

The results showed that children in both the intervention and the control groups had high anti-South Asian bias and low socialising preference for South Asian children in the pre-intervention phase. This result shows that racial attitudes are formed during the early years (Iruka et al., 2021; Katz, 2013). The development of racial attitudes is related to children's establishment of self-identity, where they identify with their in-groups and exclude outgroup members (Katz, 2013). This social group information can be used as cues to determine trustworthiness in friendship selection (Mills, 2013). The fact that Chinese children preferred to socialise with their in-group members is consistent with previous work with majority group children in society. For example, Chen et al. (2018) found that four-year-old Chinese kindergarten children in Hong Kong had a socialising preference for Chinese over non-Chinese children. These concepts of South Asians' "inferior" social status and socialising preference for in-group members may be inherited from parents, peer groups, and even teachers of Chinese children (Farago et al., 2019). As a result, South Asian children are often excluded by Chinese children in mainstream classrooms. Social exclusion can lead to

psychological distress and have negative impacts on children's school engagement and performance (Nishina et al., 2019). Therefore, it is important to promote the inclusion of South Asian children in mainstream classrooms.

Intervention Effectiveness

The intervention was effective in lowering the anti-South Asian bias of Chinese children in the intervention group, despite the small effect size. Previous interventions that aim to promote the inclusion of minority students are generally based on the seminal work of Katz and Zalk (1978) and rooted in the anti-bias theory and contact theory (Aboud et al., 2012). Similarly, the design of this intervention is informed by the two theories. The first part of the intervention involves the teacher telling a story that depicts a rainbowsaurus, a dinosaur who is different from the others. This scenario is similar to the case of South Asian students in mainstream classrooms. Chinese children were exposed to information on incidents of exclusion. The storytelling was followed by discussion and explicit advice on emotional and behavioural responses to the incidents. Direct exposure to information to alter children's attitudes towards diverse groups and develop respect for all groups through media and explicit advice is rooted in the anti-bias theory (Aboud et al., 2012). Previous studies have shown that direct instructions, such as educational videos and race-related discussions, were effective in reducing outgroup bias and in-group preference of white children towards black children (Vittrup & Holden, 2010). The second part of the intervention involved cooperative learning activities, which required all group members' input to progress towards a shared goal. This practice is based on the contact theory, which emphasises providing opportunities for positive and sustained interactions across groups to reduce prejudice (Allport, 1954). A body of empirical evidence suggests the significance of cross-group interactions as a critical social context for developing intergroup sympathy and inclusive intentions (Grütter et al., 2018). Cooperative learning is an effective instructional strategy for promoting intergroup understanding and reducing prejudice (van Ryzin & Roseth, 2018). Nevertheless, some intervention studies based on the two theories reported non-significant (e.g., Perkins & Mebert, 2005) or negative effects (e.g., Verkuyten & DeWolf, 2007), contrary to our findings.

These results need to be interpreted with caution since learning materials and activities that were not tailored to the cognitive and emotional maturity of children might have been used, impeding intervention effectiveness (Gillies, 2016).

While there are immediate effects of this intervention on reducing anti-South Asian bias of Chinese children, this one-off intervention was not effective in increasing reported socialising preference for South Asian children, which is contrary to our hypothesis. Some scholars suggest that racial attitudes predict socialising preference and inclusive behaviour (Ajzen & Cote, 2008). However, others propose a discrepancy between racial prejudice and discriminatory behaviour (Quillian, 2006). Racial attitude alone cannot predict socialising preference for outgroup members since a complex interplay of factors, such as cultural norms and individual experiences, influences socialising preference. Changes in socialising preference can only be observed if long-term and sustained positive interactions among diverse groups are provided (e.g., Li et al., 2016). This requires concerted efforts by different stakeholders to provide an inclusive social climate, which is the prerequisite for developing cross-group friendships and accepting outgroup members (Scorgie & Forlin, 2019). Aboud et al. (2012) conducted a systematic review of 32 studies that evaluated the effectiveness of interventions designed to reduce ethnic prejudice and discrimination in young children. They found more positive intervention effects on racial attitudes than on peer relations. Our findings are consistent with those of Aboud et al. (2012).

Implications

The formation of attitudes and behaviours towards diverse groups takes place in the early years, and minority children may experience exclusion in mainstream classrooms. Despite increasing attention to the education of children from ethnic minority groups by the Hong Kong government in recent years, most resources are devoted to addressing South Asian students' short-term academic failure, especially their lack of Chinese language proficiency (e.g., Li & Chuk, 2015; Shum et al., 2011). Little has been done to address the social exclusion faced by South Asian students. Promoting their inclusion in mainstream classrooms is crucial to achieving success in the educational setting since a sense of security

is the prerequisite for children's school engagement and performance (Nishina et al., 2019). Despite their relatively small population, the inclusion and future success of South Asians hold significant implications for Hong Kong, as they represent a vital and valuable segment of the city's human capital. However, much effort must be exerted before Hong Kong can reach its self-branded position as Asia's world city, which is open, tolerant, and pluralistic. Schools should take the initiative to cultivate an inclusive environment by implementing diverse curricula, providing cultural competence training for teachers, and involving minority parents in school affairs (Scorgie & Forlin, 2019). These are the prerequisites for developing cross-group friendships and promoting racial harmony.

The findings of this study also point to the potential strength of scaling up this intervention to promote inclusion at the classroom level. Although this intervention was a one-off event with a small sample size due to practical issues, participating children's decrease in anti-South Asian bias indicates the potential to scale up this intervention and examine its long-term impacts. By scaling up this intervention with a larger sample of majority children in representative contexts where there is possible racial bias, we can understand the effectiveness of this intervention and its feasibility in different contexts. Promoting the inclusion of minority children in different contexts is essential since the successful integration of minority children into society has far-reaching impacts, which is vital for policy discussions.

Limitations

The findings of this study need to be interpreted with caution. First, the effectiveness of the intervention was examined using a relatively small sample, limiting the generalisability of findings and raising the risk of Type II errors. Future studies may employ a longitudinal design and recruit more participants from different kindergartens to examine the long-term effects of the intervention on children's racial attitudes and socialising preferences. Second, this intervention was a one-off intervention without follow-up sessions for logistical reasons. Future studies may implement interventions with similar designs over a longer time frame (i.e., more sessions) to investigate the impact of sustained interactions between majority and

minority children on socialising preferences. Additionally, while the current quantitative measures yielded valuable preliminary insights into the short-term effects of the intervention, future research would benefit from incorporating more in-depth qualitative methods, such as child interviews, observational assessments, and data from multiple informants. These approaches can provide richer insights into children's thought processes, social reasoning, and the underlying mechanisms driving their biases and social preferences. Such comprehensive methods would offer a more nuanced understanding of how interventions influence majority and minority children. Furthermore, future interventions could adopt a sustained, whole-school approach more closely aligned with the four core goals of the anti-bias education framework - identity, diversity, justice, and activism - as articulated by Derman-Sparks and Edwards (2010). Despite these limitations, this study is a preliminary investigation to assess the short-term feasibility and immediate impact of a developmentally appropriate classroom activity on children's implicit bias and socialising preferences. Findings of this study lay the groundwork for future research involving larger samples and multi-session interventions.

Conclusion

In Hong Kong, minority South Asian students are likely to be excluded by Chinese children in mainstream classrooms, which lowers their school engagement and performance. Because of this, this study examined the effectiveness of a classroom-based intervention in reducing Chinese children's anti-South Asian bias and increasing their socialising preference for South Asian children. The findings of this study showed that only anti-South Asian bias of Chinese children in the intervention group was lower than those in the control group. Disappointingly, the intervention did not influence reported socialising preferences with South Asian children. The findings have the potential to inform the design of future intervention programmes that aim to promote the inclusion of minority children in mainstream classrooms.

References

- Aboud, F. E., Tredoux, C., Tropp, L. R., Brown, C. S., Niens, U., Noor, N. M., & Una Global Evaluation Group. (2012). Interventions to reduce prejudice and enhance inclusion and respect for ethnic differences in early childhood: A systematic review. *Developmental Review*, 32(4), 307-336. <https://doi.org/10.1016/j.dr.2012.05.001>
- Ajzen, I., & Cote, N. G. (2008). Attitudes and the prediction of behaviour. *Attitudes and Attitude Change*, 13, 289-305.
- Allport, G. W. (1954). *The Nature of Prejudice*. Cambridge, MA: Perseus Books.
- Bisin, A., & Verdier, T. (2011). The economics of cultural transmission and socialisation. In *Handbook of social economics* (Vol. 1, pp. 339-416). North-Holland.
- Census and Statistics Department. (2022). *2021 Population census – Thematic report: Ethnic minorities*. Hong Kong: Census and Statistics Department.
- Chen, E. E., Corriveau, K. H., Lai, V. K. W., Poon, S. L., & Gaither, S. E. (2018). Learning and socialising preferences in Hong Kong Chinese children. *Child Development*, 89(6), 2109-2117. <https://doi.org/10.1111/cdev.13083>
- Cheung, K., & Chou, K. (2017). Child poverty among Hong Kong ethnic minorities. *Social Indicators Research*, 137(1), 93-112. <http://doi.org/10.1007/s11205-017-1599-z>
- Crabtree, S., & Wong, H. (2013). ‘Ah Cha’! The racial discrimination of Pakistani minority communities in Hong Kong: An analysis of multiple, intersecting oppressions. *The British Journal of Social Work*, 43(5), 945-963. <http://doi.org/10.1093/bjsw/bcs026>
- Derman-Sparks, L., & Edwards, J. O. (2010). *Antibias education for young children and ourselves*. National Association for the Education of Young Children.
- Derman-Sparks, L., LeeKeenan, D., & Nimmo, J. (2015). *Leading antibias early childhood programs: A guide for change*. Teachers College Press.
- Farago, F., Davidson, K. L., & Byrd, C. M. (2019). Ethnic-racial socialisation in early childhood: The implications of color-consciousness and colorblindness for prejudice development. *Handbook of children and prejudice: Integrating research, practice, and policy*, 131-145.
- Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Austr. J. Teach.*

- Educ. 41*, 39-54. <http://doi.org/10.14221/ajte.2016v41n3.3>
- Goforth, A. N., & Pham, A. V. (2023). *Culturally responsive school-based practices: Supporting mental health and learning of diverse students*. Oxford University Press.
- Grütter, J., Gasser, L., Zuffianò, A., & Meyer, B. (2018). Promoting inclusion via cross-group friendship: The mediating role of change in trust and sympathy. *Child Development, 89*, e414-e430. <https://doi.org/10.1111/cdev.12883>
- Halbeisen, G., Walther, E., & Schneider, M. (2017). Evaluative conditioning and the development of attitudes in early childhood. *Child development, 88*(5), 1536-1543. <https://doi.org/10.1111/cdev.12657>
- Iruka, I. U., Curenton, S. M., Sims, J., Harris, K., & Ibekwe-Okafor, N. (2021). Ethnic-racial identity formation in the early years. *Durham, NC: Hunt Institute*.
- Katz, P. A. (2013). The acquisition of racial attitudes. *Towards the elimination of racism: Pergamon general psychology series, 54*, 125.
- Katz, P. A. (2020). Incipient racism? When does it start? Racial attitude development in young children. *Advances in Social Sciences Research Journal, 7*(9).
- Katz, P. A., & Zalk, S. R. (1978). Modification of children's racial attitudes. *Developmental Psychology, 14*(5), 447.
- Keles, S., Munthe, E., & Ruud, E. (2021). A systematic review of interventions promoting social inclusion of immigrant and ethnic minority preschool children. *International Journal of Inclusive Education, 1*-16. <https://doi.org/10.1080/13603116.2021.197967>
- Kinzler, K. D. (2020). *How you say it: Why you talk the way you do and what it says about you*. Mariner Books.
- Kinzler, K. D., & Dautel, J. B. (2012). Children's essentialist reasoning about language and race. *Developmental Science, 15*(1), 131-138.
- Kissinger, K. (2017). *Antibias education in the early childhood classroom: Hand in hand, step by step*. Taylor & Francis.
- Li, D. C., & Chuk, J. Y. (2015). South Asian students' needs for Cantonese and written Chinese in Hong Kong: A linguistic study. *International Journal of Multilingualism, 12*(2), 210-224. <https://doi.org/10.1080/14790718.2015.1009375>
- Li, Y., Coplan, R. J., Wang, Y., Yin, J., Zhu, J., Gao, Z., & Li, L. (2016). Preliminary

- evaluation of a social skills training and facilitated play early intervention programme for extremely shy young children in China. *Infant and Child Development*, 25(6), 565-574. <https://doi.org/10.1002/icd.1959>
- Liebkind, K., Mäkinen, V., Jasinskaja-Lahti, I., Renvik, T. A., & Solheim, E. F. (2019). Improving outgroup attitudes in schools: First steps toward a teacher-led vicarious contact intervention. *Scandinavian Journal of Psychology*, 60(1), 77-86. <https://doi.org/10.1111/sjop.12505>
- Meltzoff, A. N., & Gilliam, W. S. (2024). Young children and implicit racial biases. *Daedalus*, 153(1), 65-83.
- Mills, C. M. (2013). Knowing when to doubt: Developing a critical stance when learning from others. *Developmental Psychology*, 49, 404-418. <http://doi.org/10.1037/a0029500>
- Nguyen, A. (2022). “Children have the fairest things to say”: Young children’s engagement with anti-bias picture books. *Early Childhood Education Journal*, 50(5), 743-759.
- Nishina, A., Lewis, J. A., Bellmore, A., & Witkow, M. R. (2019). Ethnic diversity and inclusive school environments. *Educational Psychologist*, 54(4), 306-321. <https://doi.org/10.1080/00461520.2019.1633923>
- Perkins, D. M., & Mebert, C. J. (2005). Efficacy of multicultural education for preschool children: A domain-specific approach. *Journal of Cross-Cultural Psychology*, 36, 497-512.
- Pettigrew, T. F., & Tropp, L. R. (2005). Allport’s intergroup contact hypothesis: Its history and influence. *On the nature of prejudice: Fifty years after Allport*, 1, 262-277.
- Qian, M. K., Heyman, G. D., Quinn, P. C., Messi, F. A., Fu, G., & Lee, K. (2016). Implicit racial biases in preschool children and adults from Asia and Africa. *Child Development*, 87, 285-296. <https://doi.org/10.1111/cdev.12442>
- Qian, M. K., Quinn, P. C., Heyman, G. D., Pascalis, O., Fu, G., & Lee, K. (2019). A long-term effect of perceptual individuation training on reducing implicit racial bias in preschool children. *Child Development*, 90(3), e290-e305.
- Quillian, L. (2006). New approaches to understanding racial prejudice and discrimination. *Annu. Rev. Sociol.*, 32, 299-328.
- Rastogi, R., & Juvonen, J. (2019). Interminority friendships and intergroup attitudes across

- middle school: Quantity and stability of Black-Latino ties. *Journal of Youth and Adolescence*, 48, 1619-1630. <https://doi.org/10.1007/s10964-019-01044-9>
- Richardson, J. T. E. (2011). Eta squared and partial eta squared as measures of effect size in educational research. *Educational Research Review*, 6(2), 135-147. <https://doi.org/10.1016/j.edurev.2010.12.001>
- Scorgie, K., & Forlin, C. (2019). *Promoting social inclusion: Co-creating environments that foster equity and belonging*. Emerald Publishing.
- Shum, M., Gao, F., Tsung, L., & Ki, W. W. (2011). South Asian students' Chinese language learning in Hong Kong: Motivations and strategies. *Journal of Multilingual and Multicultural Development*, 32(3), 285-297.
- Shutts, K., Kinzler, K. D., Katz, R. C., Tredoux, C., & Spelke, E. S. (2011). Race preferences in children: Insights from South Africa. *Developmental Science*, 14(6), 1283-1291.
- Slobodin, O., Noufi, T., & Caspi, Y. (2023). Interventions to reduce racial bias and prejudice in preschool children: A systematic review of the literature since 2010. *School Mental Health*, 15(4), 1017-1032.
- van Ryzin, M. J., & Roseth, C. J. (2018). Enlisting peer cooperation in the service of alcohol use prevention in middle school. *Child Development*, 89, e459-e467. <https://doi.org/10.1111/cdev.12981>
- Verkuyten, M. (2022). Understanding intergroup relations in childhood and adolescence. *Review of General Psychology*, 26(3), 282-297.
- Verkuyten, M., & De Wolf, A. (2007). The development of in-group favoritism: Between social reality and group identity. *Developmental Psychology*, 43, 901-922.
- Vittrup, B., & Holden, G. W. (2010). Exploring the impact of educational television and parent-child discussions on children's racial attitudes. *Analyses of Social Issues and Public Policy*, 11(1), 82-104. <https://doi.org/10.1111/j.1530-2415.2010.01223.x>
- Williams, J. E., Best, D. L., Boswell, D. A., Mattson, L. A., & Graves, D. J. (1975). Preschool racial attitude measure II. *Educational and Psychological Measurement*, 35(1), 3-18.