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Chinese children show racial and skin-tone salience but little color evasion

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Abstract

Children may notice racial differences (i.e., show racial and/or skin-tone salience), but deliberately avoid mentioning such differences (i.e., color evasion) with increasing age. This contradiction may be due to prevailing egalitarian social norms about race. Color evasion is understudied among children in China. In a sample of 155 Chinese children (71 girls and 84 boys) aged 7–11 years from urban regions of China, we collected measures of children's racial and/or skin-tone salience and color evasion as well as their attitudes toward light-skinned East Asian, tan-skinned East Asian, and White groups. Analyses revealed that racial differences were salient to Chinese children, and that they showed little color evasion. Skin tone was most salient in children's categorization performance. We found a preference hierarchy where light-skinned East Asian people were favored most, and White people least. Color evasion was negatively related to Chinese children's positive attitudes toward White people. The findings emphasize the importance of social contexts in shaping children's racial attitudes.

KEYWORDS

Chinese context, color evasion, colorism, racial salience, racism, skin tone

1 | INTRODUCTION

Racial and/or skin-tone salience refers to noticing racial differences and using these features to categorize others (Pauker, Xu, et al., 2016). Not only adults, but also young children can use race to categorize others (Lipman et al., 2021). The Developmental Intergroup Theory suggests that racial and/or skin-tone salience is an important precursor to children's negative attitudes toward different racial groups (Bigler & Liben, 2007). In the United States, racial and/or skin-tone salience has been found to evolve into color evasion (noticing but avoiding mentioning racial differences) in the context of cultural ideologies that suggest silence about race and racism is best, which in turn may relate to negative racial attitudes (Vittrup, 2018). It is unclear whether children in a racially homogenous society with less clear egalitarian social norms about race compared to the United States, would display racial and/or skin-tone salience as well as color evasion, and how this would relate to racial attitudes. The current study examined Chinese children's racial and/or skin-tone salience and color evasion, and their relations with attitudes toward light-skinned East Asian, tan-skinned East Asian, and White people. With this design we can test whether skin tone outweighs other factors of racial features with regard to children's preferences in China, where White mainstream beauty standards prevail (Yu, 2021).

1.1 | Racial and/or skin-tone salience and color evasion

Social and developmental theories propose that identifiable perceptual cues such as physical appearance contribute to the process of children's categorization, which may result in individuals being perceived and treated differently based on the groups to which they belong (Pauker, Williams, et al., 2016). The ability to perceptually categorize faces based on race emerges early in infancy (Quinn et al., 2016). A study focusing on the White-Asian contrast found that children in the United States aged 4–9 years were clearly sensitive to skin color and other aspects of facial physiognomy in categorization tasks (Dunham et al., 2016). Racial and/or skin-tone salience is an important precursor to the formation of intergroup attitudes. According to Developmental Intergroup Theory (Bigler & Liben, 2007), there are three key processes contributing to the formation of prejudice: (a) salience of personal attributes, (b) categorization by salient dimensions, and (c) development of stereotypes and prejudices of salient social groups. Categorizing others with a salient dimension such as race, can initiate a process that leads to the development of stereotypes and prejudice. Indeed, a study with American children aged 3–10 years suggested that sorting others by race explained the children's increased racial stereotypes (Pauker et al., 2010). Similarly, researchers found that Chinese preschoolers who performed better in racial categorization had stronger implicit racial bias (Setoh et al., 2019). Taken together, racial and/or skin-tone salience can serve as a precursor to children's development of racial bias.

However, according to Color-Blind Racial Ideology Framework (Neville et al., 2013), talking about race can help reduce racial injustices and bias as it exposes racism, whereas avoiding mention of race may indicate denial of racism (Pahlke et al., 2012). As children develop the ability to “see and organize by race” (i.e., race salience; Pauker et al., 2010), they may choose to verbally mention these differences (i.e., color consciousness) or avoid mentioning them (i.e., color evasion) in their justifications for categorization performance. Specifically, color evasion focuses on whether individuals avoid mentioning racial differences even if such differences are salient to them (Neville et al., 2013). In multicultural societies such as the United States, race is salient to White children but they may choose to avoid talking about it (Apfelbaum, Pauker, et al., 2008). Indeed, US based evidence revealed that older children (10 and 11 years), compared to younger children (8 and 9 years), tend to avoid mentioning race in a matching task, where avoiding mention of racial differences comes at the cost of performance efficiency (Apfelbaum, Pauker, et al., 2008). With increasing age, children develop internalized social norms pertaining to anti-prejudice. To appear unbiased, children tend to pick up on the color evasion strategy that adults employ and accordingly deliberately avoid salient racial features. Although there is no consensus, based on empirical evidence regarding how color evasion relates to racial attitudes (Vittrup, 2018; Whitley & Webster, 2019), researchers suggest that the adoption of the color

evasion ideology does not reduce racial prejudice but rather allows racial prejudice to fester (Neville et al., 2013; Pahlke et al., 2012). An empirical study with White American adults showed that adopting a color-evasive strategy by avoiding mentioning race in a collaborative task, where optimal performance requires acknowledgment of racial difference, was related to more nonverbal unfriendly behaviors to Black people (Apfelbaum, Sommers, et al., 2008). The strategic inhibition of mentioning race, particularly when race is perceptually salient and practically useful, is cognitively demanding. Such use of cognitive resources can decrease regulatory capacity and heighten interaction anxiety, which in turn may diminish inhibition of social inappropriateness. Moreover, color evasion ideology is seen as a manifestation of racial prejudice, as it encourages people to ignore and disregard race, which renders individuals unwilling and unable to detect and confront the continued existence of racism (Neville et al., 2013).

Most studies on color evasion have been done in Western countries, where the social norm is that blatant racial prejudice is inappropriate and unacceptable. In the context of China, a racially homogenous society where issues of racism are less openly discussed in public discourse, there is a less strong social norm of anti-racism compared to the United States (Cheng, 2019). Given this context, the prevalence and meaning of children's color evasion in the Chinese context, and how it relates to Chinese children's racial attitudes cannot simply be inferred from results from Western studies.

1.2 | Racism and colorism in China

The dominant racial group in China consists of East Asian people. The racially homogeneous environment of China may obscure the issues of racism against other racial groups (Cheng, 2011; Galtung & Stenslie, 2014). Indeed, Chinese people living in China, especially on social media, tend to treat racism as relatively more acceptable than people in other countries (Cheng, 2019). For example, many social media accounts in Weibo, a dominant Twitter-like social media platform in China, are posting racist comments and hate speech, such as labeling Black bodies as diseased and their physical presence as a threat to the safety of the Chinese majority (Liu & Deng, 2020). These expressions of racism have been "retweeted" by many Chinese users on Weibo and were spread on other major social media platforms in China. In addition, research shows that White people in China feel excluded as the privileged yet marginalized "others" (Liu & Dervin, 2022). There have also been reports of systematic discrimination against Africans during the COVID-19 pandemic (Human Rights Watch, 2020). Such institutionalized racism, may both reflect and facilitate growing tolerance and acceptance of racism in Chinese society. In addition, unlike active protests against racism in the United States (e.g., Black Life Matters, Stop Asian Hate), minority racial groups in China instead choose to adjust their own behavior to adapt to Chinese majority norms (Lan, 2022; Liu & Dervin, 2022). Such silence on discrimination may make racism more socially acceptable in China compared to the United States. Consequently, Chinese children growing up in China might be less aware of the issues of racism compared to US children, which in turn might make them less concerned about appearing racist, and therefore less inhibited to use racial characteristics to group others.

Social acceptability of prejudice within a society guides individuals' attitudes related to stereotypic beliefs and behaviors (West & Hewstone, 2012). Children are especially prone to follow the perceived norms when they express prejudice (Váradi et al., 2021). Indeed, a study with Chinese children aged from 4 to 19 years showed that Chinese children displayed both explicit and implicit racial bias toward White people (Qian, Heyman, et al., 2019). Similarly, a recent study using a story-telling task to examine Chinese children's prosocial behavior toward Chinese and White members, revealed an ingroup bias such that children were more prosocial with Chinese individuals (Du et al., 2021). These findings are consistent with Social Identity Theory postulating that individuals tend to favor their own groups over other groups (Tajfel & Turner, 2004). Many Chinese children growing up in China are isolated from racially diverse groups and develop their attitudes about other racial groups in the absence of direct contact. Due to limited interaction with other racial groups, White people are likely to be viewed as the outgroup versus the East Asian ingroup (Chen et al., 2018).

However, due to the hegemony of White people and White culture worldwide, White people may have become a paradoxical outgroup in contemporary China (Liu & Croucher, 2022). That is, White people are a numerical minority

but preferred to some extent in Chinese society. Indeed, White people are still viewed as superior as a result of historical dominance in many parts of the world (Lan, 2016; Stohry et al., 2021). Westernized beauty ideals and standards might be one of the most noticeable aspects of White preference (Stohry et al., 2021). The preference for light skin tone and the popularity of facial features such as large eyes are perpetuated by social media (Xie & Zhang, 2013). Light skin tone in particular is valued and favored in China and other Asian societies. Literature on colorism, which refers to discrimination based on skin tone, has revealed that people in Asian societies including China exhibit a strong form of coloristic preferences, by which a light skin tone is preferred to a tan skin tone (e.g., Yeung, 2015; Yu, 2021). Prior to contact with the West, Asian societies highlighted the role of classism and aesthetics in the formation of early colorism, which were often based on social status and sun exposure (Dixon & Telles, 2017). Specifically, individuals in low-status occupations labored in the sun, whereas high-status persons tended to work indoors (Xie & Zhang, 2013). This phenomenon of colorism has been reinforced as a result of Western colonialism and imperialism, where lighter skin was associated with higher social status. This has led to a widespread cultural belief that lighter skin is superior to darker skin, and that those with lighter skin are more desirable and attractive (Yu, 2021). Indeed, skin whitening products are widely marketed and used in China, with the message that lighter skin is preferable and can lead to improved socio-economic outcomes (Hermosilla et al., 2018; iResearch Global Group, 2022). Furthermore, a qualitative study has shown that all participants in their Chinese sample acknowledged that lighter skin is preferable in Chinese culture, and when given the choice between indoor and outdoor leisure activities, most Chinese women would prefer to stay indoors to prevent getting tanned (Chen et al., 2022). This preference for light skin tones in China results in advantages for Chinese women with fair skin in terms of job opportunities and dating prospects (Yeung, 2015; Zhang, 2012).

Research indeed shows that Chinese children's perceptions of beauty standards have been affected by the globalized media (e.g., White-dominated Disney cartoons and picture books). This was reflected for example by Chinese children's portrait drawing of human figures which were made to look like White people (Wang, 2018). In addition, a study of racial representation in books for young children in China revealed a dominant representation of White characters and a preference for light skin tone in East Asian characters in illustrations (Yang et al., 2022). Advertisements and magazines in China showcase many White models (Jung, 2018), and children walking seeing those might be sensitive to this preference for whiteness (Chan et al., 2012). Overall, the whiteness normativity messages that young children receive through multiple channels in their daily life, might reflect the early childhood origins of the White preference in China.

The "paradox" that White people are a numerical minority but are preferred as a function of Westernized White beauty ideologies was examined by including tan-skinned East Asians, along with light-skinned East Asians in the current study. Combined with the perspective of Social Identity Theory and pervasive Westernized White beauty standards in China, Chinese children might display a preference hierarchy for the three groups, namely light-skinned East Asian group, tan-skinned East Asian group, and White group. The White versus light-skinned East Asian group are not so obviously marked by skin color differences (Dunham et al., 2016; Karkkainen & Joo, 2019). Because skin tone is not salient in the distinction between light-skinned East Asian versus White people, racial group membership might be prioritized in children's attitudes. That is, Chinese children may prefer light-skinned East Asian people over White people based on Social Identity Theory. Indeed, a study with a sample of Chinese preschool children showed that Chinese children favored Asian over White people, where the face skin tone was not markedly different between the Asian and White group (Qian, Quinn, et al., 2019). However, because skin tone can be salient in the distinction between White versus tan-skinned East Asians, skin tone might trump race as a priority factor contributing to Chinese children's attitudes due to the pervasive Westernized White beauty standards. Therefore, White people might be preferred over tan-skinned East Asians for Chinese children living in China. In this study, we use the term racial groups to distinguish between East Asian and White people. Because skin tone can vary within the East Asian racial group, we further distinguish between light-skinned versus tan-skinned East Asian people. Including light-skinned East Asian, tan-skinned East Asian, and White people as the target groups in our study, we can examine both race and skin tone preferences in Chinese children.

1.3 | Developmental pattern of color evasion and racial attitudes

Western-based research with samples of American children found that children showed greater racial and/or skin-tone salience with increasing age (Pauker et al., 2010). As early as 6 months old, children exhibit the ability to perceptually categorize faces by racial features (Quinn et al., 2016). Around the age of 7, children further develop the capacity to categorize individuals into racial groups (Pauker et al., 2010). During early and middle childhood, the primary factor of categorization decisions is skin color (Dunham et al., 2015). Although the ability to notice racial differences increases by age, older children tend to pick up on the color evasion strategy and accordingly deliberately avoid mentioning salient racial features (Apfelbaum, Pauker, et al., 2008). Most children are able to internalize social norms of equality and have the capacity to self-regulate according to social expectations around 9 years (Huppert et al., 2019; Raffaelli et al., 2005). To escape the negative social consequences, older children with a greater understanding of social norms and better self-regulation are less likely to mention racial differences (Kawakami et al., 2021). A US based study revealed that children at the age of 10 and 11 years, compared to 8- and 9-year-old children, tend to avoid mentioning race in a matching task (Apfelbaum, Pauker, et al., 2008).

Whether the developmental pattern revealed in Western research is also applicable to Chinese children in China is unclear. To shed light on the as yet unknown patterns of racial and/or skin-tone salience and color evasion in children in China, we examined Chinese children's development of racial and/or skin-tone salience, color evasion, and racial attitudes, by focusing on two groups: a younger group (7–9 years) and an older group (9–11 years). We used categorical age groups because socio-cognitive theory (Aboud, 1988) and previous Western research have shown that around the age of 9, children tend to display a decrease in negative attitudes toward racial outgroups and exhibit more neutral attitudes (Nesdale et al., 2005; Pauker et al., 2017). This shift might be attributed to children's social-cognitive development, resulting in less rigidity in categorization and increased awareness of egalitarian social norms (Pauker et al., 2017). We expected that Chinese children might show an opposite developmental pattern of Western children. That is, Chinese children might show greater racial and/or skin-tone salience but less color evasion than their US counterparts due to lacking awareness of egalitarian norms and discourse pertaining to anti-racism in Chinese society. Furthermore, as children transition from middle childhood to pre-adolescence and start to formulate group identity, there might be an increase in children's use of race to guide their behaviors and display of prejudice, especially in an environment where prejudice against other racial outgroups is relatively acceptable (Cheng, 2019; Pauker et al., 2017).

1.4 | The current study

The overarching goal of this study was to increase our understanding of Chinese children's racial and/or skin-tone salience, color evasion, and attitudes toward groups that are distinct in terms of race (East Asian vs. White) or skin tone (light-skinned vs. tan-skinned East Asian). This study was conducted in the racially homogenous Chinese context, where the dominant racial group consists mainly of East Asian people but Westernized White beauty standards are prevalent. The following hypotheses were tested: (1) Chinese children demonstrate racial and/or skin-tone salience but little color evasion. In other words, Chinese children categorize the target groups present in the measures based on racial differences, but do not deliberately avoid mentioning racial differences as categorization reasons. (2) Chinese children's attitudes (i.e., preference/positivity, rejection/negativity) differ toward the three groups. Specifically, Chinese children display more preference/positivity attitudes and less rejection/negativity attitudes toward light-skinned East Asian people than White people based on Social Identity Theory, which proposes that individuals favor their own racial group over others. Further, in light of the pervasive Westernized White beauty standards in China, Chinese children exhibit more preference/positivity attitudes and less rejection/negativity attitudes toward light-skinned East Asian and White people than tan-skinned East Asian people; (3) Compared to younger children, older children more likely to show racial and/or skin-tone salience but less likely to show color evasion, and display less preference/positivity attitudes and more rejection/negativity attitudes toward White or tan-skinned East Asian people.

(4) Greater racial salience is associated with greater expression of rejection/negativity attitudes and less display of preference/positivity attitudes toward White or tan-skinned East Asian people. Regarding color evasion in relation to Chinese children's racial attitudes, considering that there was no consensus on how they related to each other based on Western research to date, we took an exploratory approach to the analyses.

2 | METHOD

2.1 | Participants

The participants were 155 Chinese children from two age groups: 78 aged from 7 to 9 years old (33 girls and 45 boys; $M = 7.90$ years, $SD = .57$), and 77 aged from 9 to 11 years old (38 girls and 39 boys; $M = 9.81$ years, $SD = .59$). Of note, the age of exactly 9 years was not included in the both age groups, because in this study the age was defined as a continuous variable (e.g., 9.88 years) rather than an integer (e.g., 9 years), and there was no child at the age of exactly 9 years on the day of participation. Participating children were primarily recruited from urban areas of Shanghai and Jinan through multiple channels including organizations, schools, and social media. We based our sample size on an a priori power analysis that provided us with 95% power ($\alpha = .05$) to detect medium-sized main effects in all conducted analyses. All children were born in urban areas and from middle-income families. Most children's mothers and fathers had a high level of education (92% mothers and 88% fathers gained bachelor's degree/higher vocational education or higher). The family income was above the average income of urban households in China for 86% of the families. Most children (91%) attended public schools in the absence of children from other racial groups.

2.2 | Procedure

Data were collected from April 2021 to January 2022. Due to strict contact restrictions in the COVID-19 pandemic, originally planned in-person home visits were changed to a virtual format. Researchers who implemented tasks through virtual meetings were well-trained Chinese graduate students. Prior to the virtual visit, mothers were asked to complete an informed consent form and an online questionnaire about their personal details if they were interested in participating. Participation was voluntary and respondents were assured that they can quit without consequences and that participation was anonymous. During the video-recorded virtual visits, mother and child performed several interaction tasks. Then the mother and child individually performed several computer tasks under the guidance of the researchers in the absence of other family members. While the child was completing the computer tasks, the mother was required to complete her questionnaires on the phone in a different room. The virtual visit lasted around one hour for each family. The family received a small gift after the visit. The study was approved by the Ethics committee of the authors' host institute.

2.3 | Measures

2.3.1 | Stimuli

The photos used in all the measures described below (i.e., racial and/or skin-tone salience, color evasion, preference and rejection, positivity and negativity) were taken from the Internet (<https://generated.photos/datasets>) and an existing laboratory database (Mesman et al., 2022). The children in the photos faced straight and smiled. The skin tone of the light-skinned East Asians in the photos was noticeably different from that of the tan-skinned East Asians, and was similar to that of the White group. The photos were pretested for perceived attractiveness and race by Chinese adults aged

between 18- and 32-years old ($N = 23$). A 7-point scale to was used to rate attractiveness and a multiple-choice question was used to rate race. Photos receiving extreme scores of attractiveness were dropped, as were photos for which racial categorization was not reliably accurate. Of note, people from different East Asian countries, such as China, Japan, and Korea, are difficult to distinguish by facial features alone, which is similar for White people from different countries (Srinivas et al., 2017; Wang et al., 2018). In addition, this study focused on race at a larger and more comparative level rather than on specific nationalities. Therefore, photographs used in the measures were described as East Asian or White in this article. Each of the final selected photos was cropped below the heads and into the same size with a white background. Photos in the measures of children's attitudes were matched on perceived attractiveness ($ps > .05$).

2.3.2 | Racial and/or skin-tone salience

Children were presented with photographs of six children matching their own gender, including two girls or boys of each group: light-skinned East Asian, tan-skinned East Asian, and White children. The pictures were displayed in a randomized array that was the same for each participant. The pictures in the array differed in many aspects (e.g., hairstyle), but only varied systematically on two dimensions, which were race (East Asian/White) and skin tone (light/tan). Children were instructed to group the six children based on similarity once. The number of children in each group was not required to be the same, but each group was required to have at least two children and each child had to be placed in a group. Children were allowed to adjust their sorting, and their final decision was utilized for analysis.

We classified children's categorization performance into 5 types: type I – grouped light-skinned East Asian people together versus tan-skinned East Asian people versus White people; type II – grouped light- and tan-skinned East Asian people together versus White people; type III – grouped light-skinned East Asian and White people together versus tan-skinned East Asian people; type IV – grouped tan-skinned East Asian and White people together versus light-skinned East Asian people; type V – other grouping performance which does not fit the 4 types above. The first 4 types reflect racial and/or skin-tone salience.

2.3.3 | Color evasion

Following the categorization performance, children were asked to specify why they considered certain children to be grouped together. These categorization reasons were coded into two dimensions to indicate whether or not they showed color evasion: racial characteristics and non-racial characteristics. Specifically, physical features associated with race and geographical origin, such as skin tone and eye color, were classified into racial characteristic related reasons. By contrast, physical traits such as teeth and eyebrows were classified into non-racial characteristic reasons. Within the dimension of racial characteristics, inductive thematic analysis was used to extract subthemes from text. The inductive thematic method allowed us to identify the themes of children's categorization reasons without relying on preconceived hypotheses (Guest et al., 2012). Based on children's responses, we identified three subtypes of racial characteristic reasons, which were skin tone, hair color, and nationality. Of note, in the current tasks White individuals had blond hair and East Asian people had black hair. Although hair color can vary within a single racial group, White people are typically recognized for their blond hair, while East Asians are often associated with black hair (Leerunyakul & Suchonwanit, 2020). In addition, hair color is likely to be noticed by young children as a salient physical difference to distinguish racial groups (Kemple et al., 2016). Therefore, children's categorization reasons associated with blond or black hair were classified as reflecting a choice based on racial characteristics. Moreover, although children in this study mentioned facial shape, the descriptive words they used, such as big or small, round or sharp, and fat or thin, seemed irrelevant to race-related differences. Indeed, research found that the White-Asian distinction based

on race-related facial physiognomy was challenging for children (Dunham et al., 2016). Accordingly, facial shape was classified into the dimension of non-racial characteristics related reasons. Intercoder reliability between two coders for all variables was adequate, with kappa values between .75 and .93.

2.3.4 | Preference and rejection

Children completed a social preference task based on the work by Levy et al. (2005), in which they were presented with 12 pictures: two boys and two girls of each group (light-skinned East Asian, tan-skinned East Asian, and White people). The 12 pictures were displayed in a randomized array that was consistent for each participant. Children were asked 5 questions representing preference or rejection: (1) Who would you like to sit next to in class? (2) Who would you not like to sit next to in class? (3) Who would you like to invite for a play date at your house? (4) Who would you not like to invite for a play date at your house? and (5) Who would you want to invite to your birthday party? Children were instructed to choose one or none of the children in the pictures for the first four questions, and to choose any number of children or none for the last question about the birthday party (meaning that this question only yields a preference score, as asking who children would not invite would simply be the reverse of the invitation question). Preference scores for each group reflect the frequency of selecting a child of a specific group to sit next to, play with, or invite to a birthday (potential score range 0–6). Rejection scores for each group reflect the frequency of selecting a child of a specific group to not sit next to or to not play with (potential score range 0–2).

2.3.5 | Positivity and negativity

Children completed an attribution task, which was adapted from The Multiple-Response Racial Attitude measure (Aboud, 2003). During the task, children were asked to assign five positive descriptors (e.g., nice, friendly) and five negative descriptors (e.g., naughty, mean) to any number of six children on photographs (“Point to all the children that are nice”). These pictured children represented the same groups as in the aforementioned social preference task: one boy and one girl of each group (light-skinned East Asian, tan-skinned East Asian, and White people). The pictures were displayed in a randomized array that was consistent for each participant. Participating children could also choose to not assign a descriptor to any of the children and instead assign a descriptor to the “rubbish bin.” For each group in the pictures, a positive attribution score consisted of the total number of positive descriptors divided by 2 (as there were 2 pictures of children in each group; potential range 0–5). A negative attribution score consisted of the total number of negative descriptors divided by 2 (potential range 0–5).

2.4 | Analyses

Preliminary analyses were conducted to check the distribution of the child attitudes variables. Outliers (z -score $> |3.29|$) were found for rejection of light-skinned East Asian (five outliers) and tan-skinned East Asian people (six outliers), and negativity toward light-skinned East Asian (three outliers) and tan-skinned East Asian people (five outliers). These outliers were winsorized to bring them closer to the rest of the score distribution (Tabachnick & Fidell, 2021). Winsorizing reduces the weight of outliers without eliminating them which preserves the information that a case had (Reifman & Keyton, 2010). In addition, we conducted analyses of the data without being winsorized, and the results did not differ from the data which were winsorized. Two cases had missing data. In one case, the measure of preference and rejection was missing because the research assistant accidentally used the wrong material. For the other case, all the measures were missing due to loss of the virtual visit video except for the measure of preference and rejection, as all children’s responses to this measure were manually recorded by research assistants during the

TABLE 1 Descriptive statistics of children's categorization performance and reasons related to racial characteristics.

	Prevalence	Categorization reasons related to racial characteristics		
		Skin tone	Hair color	Nationality
Type I categorization: • Light-skinned East Asian; • Tan-skinned East Asian; • White	44% (68/154)	75% (51/68)	43% (29/68)	53% (36/68)
Type II categorization: • Light- and tan-skinned East Asian; • White	13% (20/154)	5% (1/20)	30% (6/20)	70% (14/20)
Type III categorization: • Light-skinned East Asian and White; • Tan-skinned East Asian	7% (10/154)	100% (10/10)	20% (2/10)	0
Type IV categorization • other categorization performance	36% (56/154)	41% (23/56)	18% (10/56)	5% (3/56)

TABLE 2 Descriptive statistics of children's attitudes towards the three groups.

Variable	Range ^a	M (SD) ^a
Preference		
light-skinned East Asian people	0–6	3.42 (1.82)
tan-skinned East Asian people	0–6	1.73 (1.58)
White people	0–6	1.37 (1.49)
Rejection		
light-skinned East Asian people	0–2	.21 (.49)
tan-skinned East Asian people	0–2	.22 (.50)
White people	0–2	1.20 (.86)
Positivity		
light-skinned East Asian people	0–5	2.95 (1.30)
tan-skinned East Asian people	0–5	2.71 (1.36)
White people	0–5	2.00 (1.52)
Negativity		
light-skinned East Asian people	0–4.5	.73 (.86)
tan-skinned East Asian people	0–4	.60 (.87)
White people	0–5	1.56 (1.18)

^aStatistics obtained before winsorizing (actual range).

virtual visits. Because the missing data did not exceed 10% of the total sample, we used pairwise deletion for cases with missing data (see Smits et al., 2002).

Descriptive statistics of children's racial and/or skin-tone salience and color evasion are presented in Table 1 and their attitudes toward the three groups are presented in Table 2. Correlations among the study variables are presented in Table S1. Child gender was not correlated with any variables; therefore we did not include it in later analyses.

Chi-square tests were conducted to test age group differences in children's racial and/or skin-tone salience and their color evasion. Doubly multivariate repeated measures were used to examine the effect of age groups on children's attitudes toward the three target groups (i.e., four types of dependent variables: preference, positivity, rejection, negativity). Doubly multivariate repeated measures (DMRM) is a statistical analysis technique used to analyze data from studies in which multiple dependent variables are measured under different conditions (Tabachnick & Fidell, 2021). The term "doubly multivariate" indicates that the analysis involves two multivariate data sets: one corresponding to the different conditions (i.e., the three target groups in this study), and the other corresponding to the dependent variables (i.e., preference, positivity, rejection, negativity). In other words, this study utilized age group as a between-subject factor, three target groups as a within-subject factor, and children's attitudes as dependent variables. Similarly, DMRM was used to examine the effects of racial and/or skin-tone salience on children's attitudes toward the three target groups (between-subject: salience; within-subject: three target groups; dependent variables: preference, positivity, rejection, negativity), and to test the effects of color evasion on children's attitudes (between-subject: color evasion; within-subject: three target groups; dependent variables: preference, positivity, rejection, negativity). The Wald-type statistic (W), a commonly used test statistic for multivariate data, was used to indicate statistical significance for DMRM (Friedrich & Pauly, 2018).

3 | RESULTS

3.1 | Racial and/or skin-tone salience and color evasion

Regarding Hypothesis 1 about children's racial and/or skin-tone salience, descriptive statistics showed that 44% of Chinese children categorized pictured children into the three target groups (type I), 13% grouped light- and tan-skinned East Asian people together versus White people (type II), 7% grouped light-skinned East Asian and White people together versus tan-skinned East Asian people (type III), none of the children grouped tan-skinned East Asian and White people together versus light-skinned East Asian people (type IV; see Table 1). Taken together, 64% of Chinese children in our sample demonstrated racial and/or skin-tone salience according to their categorization performance. A chi-square test of independence showed that whether children demonstrated racial and/or skin-tone salience did not differ by age, $\chi^2(1, N = 154) = .03, p = .87$. Further, there were no age differences in the different four types of categorization performance (i.e., type I, II, III, and V), $\chi^2(3, N = 154) = 3.94, p = .27$.

To examine children's color evasion, we inspected the reasons children mentioned for grouping the pictured children. Among the participating children, 79% mentioned one or more racial characteristics as categorization reasons, of which 70% mentioned skin tone, 44% mentioned nationality, and 39% mentioned hair color. Furthermore, among the children who showed racial and/or skin-tone salience (i.e., types I, II, III), 94% mentioned racial characteristics reasons to categorize. The findings indicated that most Chinese children in our sample showed little color evasion. Interestingly, among the children who categorized the pictured children based on non-racial characteristics (i.e., type V), more than half of them (52%) mentioned racial characteristics reasons even though their categorization performance did not indicate racial and/or skin-tone salience, and 41% of these children mentioned skin tone. We looked into the data of these children and most of them grouped on racial characteristics combined with other facial features, such as face shape, nose size, and hairstyle, which could explain that their categorization performance did not fit the types based on racial characteristics. There were nine children who only mentioned skin tone as grouping reasons but their grouping performance did not match the reasons; possibly they made a mistake in the process of grouping.

Chi-square tests of independence showed that children's mention of racial characteristics versus non-racial characteristics as reasons for their categorization performance did not differ by age, $\chi^2(1, N = 154) = .04, p = .84$. Further, there were no age differences in children's employ of separate racial characteristics reasons (i.e., skin tone, hair color, nationality), all $\chi^2s < 2.48$, all $ps > .11$. Overall, the findings revealed that most of the Chinese children in our

sample demonstrated racial and/or skin-tone salience but not color evasion, and skin tone was the most noticeable racial characteristics compared to other salient racial characteristics.

3.2 | Children's attitudes toward the three groups

To examine Hypothesis 2 regarding children's attitudes toward the three target groups and Hypothesis 3 about the age group differences in the attitudes (preference, positivity, rejection, negativity), we used the DMRM statistical analysis (between-subject: two age groups; within-subject: three target groups). The results showed a significant main effect of the three target groups, $W(8) = 296.44, p < .001$, and of the two age groups, $W(4) = 11.52, p < .05$. The interaction effect between the target groups and the age groups was not significant, $W(8) = 8.44, p = .39$. For the main effect of the three target groups on children's attitudes (see Figure 1), follow-up pair-wise *t*-tests revealed that children displayed higher *preference* for light-skinned East Asian people than for both tan-skinned East Asian and White people, $ps < .001$, and a preference for tan-skinned East Asian over White people, $p < .05$. Similarly, children tended to assign more *positive* descriptors to light-skinned East Asian than to tan-skinned East Asian people, $p < .05$, or to White people, $p < .001$, and assigned more positive descriptors to tan-skinned East Asian than to White people, $p < .001$. In addition, *rejection* scores between light- and tan-skinned East Asian people were not significantly different, $p = 1.00$, but children displayed greater rejection of White people than both of light- and tan-skinned East Asian people, $ps < .001$. Likewise, there was no significant difference between light- and tan-skinned East Asian *negativity* scores, $p = .15$, whereas children's negativity toward White people was significantly higher than both light- and tan-skinned East Asian people, $ps < .001$. For the main effect of the two age groups, post-hoc tests showed that older children showed more *preference/positivity* and fewer *negativity* attitudes toward all the pictured children than younger children, $ps < .05$.

Overall, partially supporting the Hypothesis 2, Chinese children demonstrated greater preference/positivity attitudes toward light-skinned East Asian people than both tan-skinned East Asian and White people. However, contrary to our hypothesis, Chinese children showed more preference/positivity attitudes toward tan-skinned East Asian than toward White people, indicating that although the children preferred light skin tone, their racial ingroup preference trumped their skin tone preference. Furthermore, regarding rejection/negativity attitudes, significant differences between light- and tan-skinned East Asian were absent, suggesting that preference for light over tan skin tone did not necessarily reflect rejection of tan skin tone. In addition, Chinese children displayed more rejection/negativity attitudes toward White people than toward both light- and tan-skinned East Asian people. Finally, contrary to our Hypothesis 3, older children showed more preference/positivity and less negativity attitudes toward all the three groups than younger children.

3.3 | Relations between salience, color evasion, and child attitudes

Regarding Hypothesis 4, DMRM was performed to first test the effects of children's racial and/or skin-tone salience (i.e., categorization performance) on their attitudes toward the three target groups (i.e., preference, positivity, rejection, negativity). The between-subject factor was children's categorization performance (whether or not showed racial and/or skin-tone salience) and the within-subject factor was the three target groups. Contrary to our hypothesis, the main effect of categorization performance on children's attitudes was not significant, $W(4) = 2.76, p = .60$, suggesting that whether or not children showed racial and/or skin-tone salience did not predict their attitudes. The main effect of the three target groups was significant, $W(8) = 289.02, p < .001$. Follow-up pair-wise *t*-tests revealed the same results as in the above section. The interaction effect was not significant, $W(8) = 1.76, p = .99$.

The effect of color evasion (i.e., categorization reasons) on children's attitudes toward the three target groups was tested using DMRM. The between-subject factor was children's categorization reasons (whether or not mentioned racial characteristics reasons) and the within-subject factor is the three target groups. The main effect of

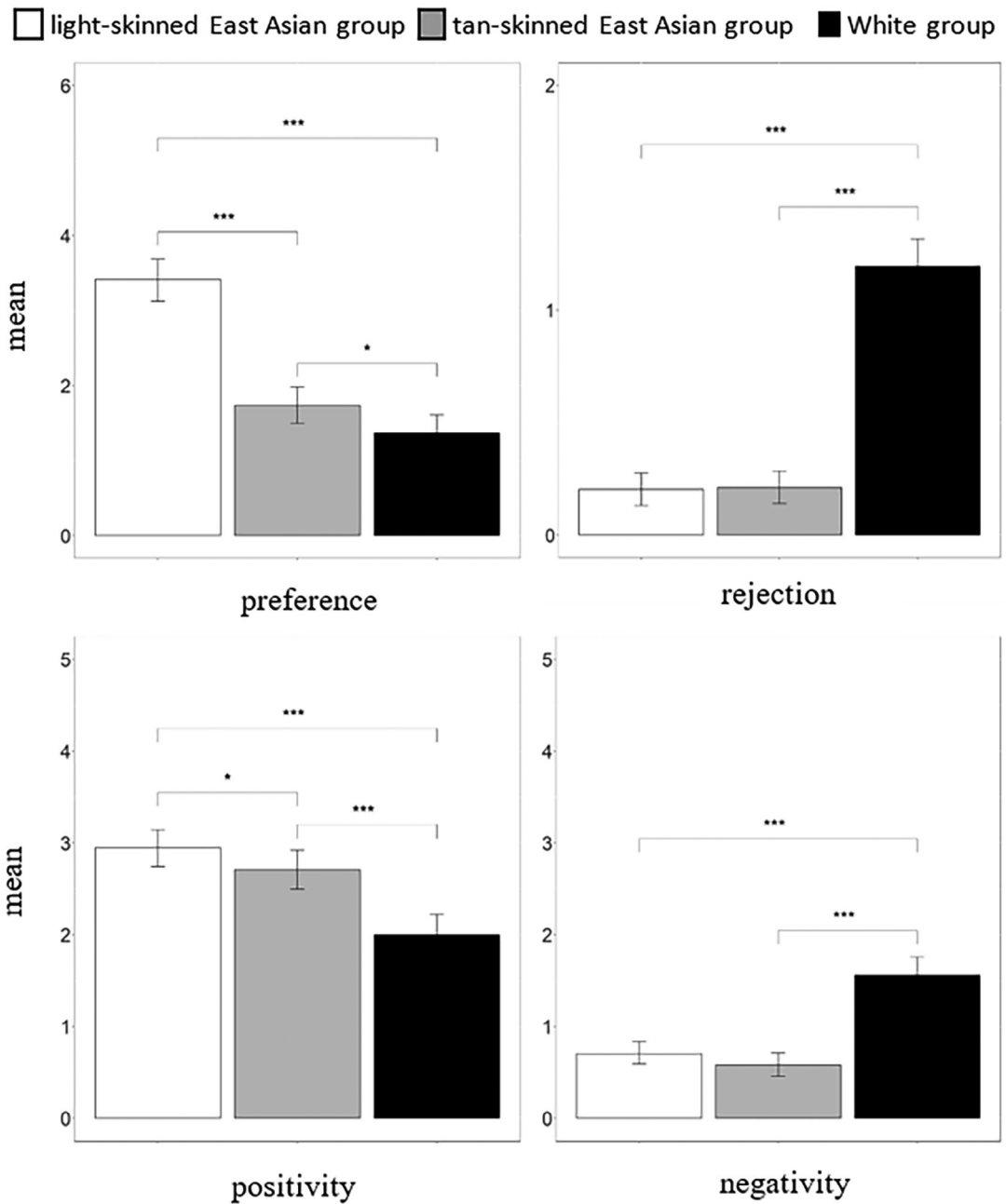


FIGURE 1 Comparison of children's attitudes towards the three target groups. Note: *** $p < .001$, * $p < .05$.

categorization reasons on children's attitudes was not significant, $W(4) = 3.18, p = .53$, suggesting that whether or not children mentioned racial characteristics reasons did not predict their attitudes. The main effect of the three target groups was significant, $W(8) = 267.84, p < .001$. Follow-up pair-wise t -tests revealed the same results as in the above section. The interaction effect was significant, $W(8) = 17.89, p < .05$. Post-hoc tests revealed a significant difference in children's positive attitudes toward White people between children who mentioned racial characteristics reasons ($M = 2.16, SD = 1.52$) and those who did not ($M = 1.50, SD = 1.45$), $F(1, 148) = 4.88, p < .05$. The results suggested that

children who displayed color evasion expressed fewer positive attitudes toward White people compared to those who did not show color evasion.

Overall, Chinese children's racial and/or skin-tone salience did not predict their attitudes toward the three target groups. Color evasion was associated with less positive attitudes toward White people.

4 | DISCUSSION

The primary goal of the study was to understand children's racial and/or skin-tone salience and color evasion in the racially homogenous society of China, and their relations to children's attitudes toward groups that are distinct in terms of race and/or skin tone. To our knowledge, this study is the first to examine Chinese children's color evasion, and their attitudes toward light- and tan-skinned East Asian people in addition to White people. The three target groups, namely light-skinned East Asian, tan-skinned East Asian, and White people, reflected different racial and skin tone combinations, which added nuance to this study. Inconsistent with Western-based findings, the results showed that Chinese children demonstrated salience of race and/or skin tone but little color evasion. A hierarchy of Chinese children's preferences for the three target groups was revealed. Specifically, Chinese children showed a preference for the light- over tan-skinned East Asian group, which likely indicates Chinese children's light skin tone preference. The preference for the two East Asian groups over the White group likely reflects racial ingroup favoritism. Importantly, the preference for tan-skinned East Asian over White people suggests that race might trump skin tone as a priority factor with regard to Chinese children's positive attitudes. Finally, racial and/or skin-tone salience was not related to children's attitudes; whereas color evasion was associated with less positive attitudes toward White people.

Hypothesis 1 that Chinese children demonstrate racial and/or skin-tone salience but little color evasion was supported. Chinese children's categorization performance was dominantly guided by attention to race and/or skin tone, and most of them employed racial differences as their categorization reasons. Skin tone played a more important role in the process of categorization compared to other racial characteristics. The results dovetail with previous findings in Western samples that skin tone exerted a greater influence on children's categorization decisions than did other aspects of facial physiognomy (Dunham et al., 2015; Stepanova et al., 2021). The results did not show age differences, neither in children's racial and/or skin-tone salience nor in color evasion. This contrasts with US findings that older children are less likely to mention race because they developed understanding about social norms pertaining to race (Apfelbaum, Pauker, et al., 2008). It might be that in the Chinese context, children are provided with relatively fewer opportunities to learn and internalize such social norms compared to children in the US context (Yu, 2022), so with increased age, at least during elementary school period, Chinese children are less likely to develop color-evasive ideologies about racial differences. This again highlights that social contexts contribute to the shaping of children's color evasion across development.

Hypothesis 2 regarding Chinese children's attitudes toward the three groups was partially supported. The preference hierarchy was found for the three groups, with the light-skinned East Asian people as the most preferred group. More specifically, Chinese children favored light- over tan-skinned East Asian people, which supports the argument that Chinese children preferred lighter skin tones. Unexpectedly, tan-skinned East Asian people were preferred over White people, which seems to contradict the notion of Whiteness preference. It may be that Chinese children's lighter skin tone preference only applies to their own racial group, and that race trumps skin tone as a priority with regard to Chinese children's preference for East Asian over White people. Indeed, a recent US based study revealed that while dark skin tone was never preferred, children's own race was meaningfully associated with their preferred skin tone (Stepanova et al., 2021). Specifically, Black children preferred a lighter skin tone, but the preferred tone was darker than White children's preferred skin tone. Taken together, children's attitudes might be influenced by an interactive pattern of skin tone and race.

Contrary to Hypothesis 3 that older children would express more negative attitudes toward White or tan-skinned East Asian people than younger children, the results revealed that older children showed less negative attitudes and

more positive attitudes toward *all* the three target groups than younger children. This finding supports US based evidence that older children show less explicit negative attitudes because of the development of social norms regarding prejudice (Raabe & Beelmann, 2011). While Chinese children grow up in a society where prejudice against racial outgroups is more acceptable than in Western societies, the development of social desirability may result in older children exhibiting less explicit negative attitudes toward *any* group. This explanation aligns with our finding that older children showed less negative attitudes and more positive attitudes toward all the three target groups, regardless of racial or skin-tone differences. To fully understand the underlying mechanisms of children's development of racial attitudes, including implicit measures to decrease influences of social desirability and assessment of children's levels of knowledge about social norms regarding race and prejudice would be useful.

The last hypothesis about the relation between Chinese children's racial and/or skin-tone salience and their attitudes toward the three groups was not confirmed. There were no significant differences in children's attitudes between children who displayed salience of race and/or skin tone and those who did not. Though notice of race as an organizing dimension may predict children's racial attitudes (Pauker et al., 2010), other social-cognitive factors may moderate the relation between racial and/or skin-tone salience and racial attitudes. That is, whether noticing race predicts racial attitudes may depend on underlying notions about race such as essentialist thinking, a belief that race cannot change because people were born that way. Indeed, researchers have found that children who hold less essentialist thinking showed less stereotyping even if race is salient to them (Pauker, Xu, et al., 2016).

The negative relation between color evasion and children's positive attitudes toward White people seems to support some Western-based findings that color evasion is related to negative racial attitudes in children (Vittrup, 2018). According to Western-based color-consciousness theory, talking about race functions as a prerequisite for anti-racism (Mesman et al., 2022; Neville et al., 2013). Specifically, in Western cultures where the topic of racism is a part of the public discourse, talking about race is connected to the acknowledgement of race and racism in societies (Vittrup, 2018), whereas avoidance of race may indicate an aversion to potential discomfort elicited by mention of race and denial of the existence of racism (Pahlke et al., 2012). Of note, although in this study children's mention of racial differences was associated with positive attitudes toward White people, it may not equal the notion of color-consciousness in Western societies, which consists of two separate dimensions, namely mentioning race and acknowledging racism (Bell, 2016; Mekawi et al., 2020). Whether Chinese children's mention of racial differences also reflects awareness and acknowledgement of racist power structures remains unclear. Indeed, the different operationalizations of color-consciousness, might partially explain the previous incongruent Western findings in how color evasion is associated with racial attitudes (Mekawi et al., 2020).

The current study has several strengths, including the use of three target groups in an effort to disentangle influences of race and skin tone, the investigation of children's color evasion and its relation to racial attitudes, and examining developmental differences. Another strength is that the study extended color evasion research to the racially homogenous Chinese context. The study also has some limitations. First, the validity of the color evasion measure (i.e., categorization task) needs to be further tested by using samples of Western children as a comparison. The rationale behind using the categorization task in this study is that children may display racial and/or skin-tone salience by grouping characters based on racial differences, whereas when providing explicit reasons for their groupings, they may intentionally avoid mentioning skin color or other racial characteristics (i.e., showing color evasion). However, it would be helpful to use a sample of Western participants to see whether they show color evasion in the categorization task as in other tasks, such as the matching task designed by Apfelbaum et al. (2008). Second, the study only examined age group differences rather than developmental trajectories of children's racial and/or skin-tone salience, color evasion, and racial attitudes. To examine individual changes, a longitudinal design with a sample that spans a wide age range would be beneficial for future developmental studies. Third, this study did not include other racial/ethnic groups such as Black and Latino people as target groups, considering that the racial/ethnic outgroup presented in mainstream social media in China largely are White people. However, it would be worthwhile to include other racial/ethnic groups in future studies to get a better picture of how children with limited cross-race exposure perceive and evaluate different racial/ethnic minorities in China. Fourth, given that there is also a skin tone variation among White

people (e.g., Scandinavian vs. Mediterranean), future studies could include darker-skinned White people to design a 2*2 study examining the interplay of race (East Asian vs. White) and skin tone (light vs. dark). Last, children in this study did not report their self-identity in terms of light- or tan-skinned tone. Given that children's perceptions of their skin tone might link to their preferred skin tone, future research should include children's self-report on their skin tone to provide a more comprehensive understanding of children's attitudes toward different racial and/or skin-tone groups (Adams et al., 2016).

In conclusion, our study shows that Chinese children in China use and mention racial characteristics to categorize others. Furthermore, we found support for a preference hierarchy where light-skinned East Asian people were favored over tan-skinned East Asian people and White people, and tan-skinned East Asian people were favored over White people. Despite the Westernized White beauty standards in the context of China, Chinese children appear to have a clear preference for East Asian people (and particularly light-skinned East Asian people) over White people. This finding advances current literature on colorism in Asian societies. Furthermore, color evasion appears to be harmful in shaping Chinese children's attitudes toward White people. Our findings emphasize the practical need to socialize Chinese children at an early age in order to mitigate colorism and racism. It is recommended that China could develop inclusive education programs that foster diversity and inclusivity through multiple socialization agencies, such as parents, teachers, and social media (e.g., Frey et al., 2022; Mesman et al., 2022; Walton et al., 2014).

The notion of mentioning racial differences should be explored further in children growing up in racially homogeneous countries to improve our understanding of racial attitudes development in non-WEIRD samples. Chinese children's mention of racial differences in lack of direct exposure to other racial groups may reflect meanings and motivations that differ from children frequently exposed to racial diversity. Thus, we urge researchers to move beyond Western samples. We look forward to seeing globally inclusive research including quantitative and qualitative approaches to delve into mechanisms in children's development of racial attitudes.

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CONFLICT OF INTEREST STATEMENT

The author declares no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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