Differential Status Evaluations and Racial Bias in the Chilean Segregated School System

Mauricio Salgado² and Javier Castillo³

Although there is growing interest in studying the long-ignored relationship between stratification and race in Chile, racial bias in person perception remains unknown. We hypothesize that the segregation of the Chilean school system generated a prestige order in which pupils are differentiated by status characteristics according to the type of school they attend, and that these evaluations are based on racial traits. To test this hypothesis, we study whether facial appearance is sufficient to impute the type of school a pupil is attending, and whether these categorizations evoke different status evaluations of wealth and morality based on race. Results confirm that participants’ perceptions of facial appearance allow them to situate pupils in the Chilean social structure. Faces categorized as studying at different types of schools varied in their perceived wealth. However, the relationship between moral traits and types of schools was weak. We also found evidence of racial bias in the participants’ perceptions of pupils’ faces: faces categorized as enrolled in municipal schools (low status) were judged with Amerindian or mestizo racial traits, while faces categorized as attending private fee-paying schools (high status) were judged with white racial traits. We did not find a relationship between race and morality.

KEYWORDS: Chile; facial appearance; racial bias; segregation; status construction theory; whiteness.

INTRODUCTION

Facial appearance is often marked in ways that bring about social categorizations (e.g., ethnicity, race, social class) in person perception. These social categorizations, or stereotypes, have a direct influence on individual action. A person’s appearance provides cues to “objective” racial and class affiliations, so to some extent, it is accurate to claim that people see social class (Mazur 1993; Pape, Rössel, and Solga 2012). These stereotypes can define identities and create symbolic boundaries between classes (Lamont 2002) that can also serve as moral boundaries: whether individuals are perceived as honest or deceitful, generous or selfish, dominant or weak. In this article, we address racial bias in person perception in Chile, a country

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where little is known about this phenomenon. Specifically, we hypothesize that the segregation of the Chilean school system generated a prestige order in which pupils are differentiated by status characteristics (such as wealth and moral worth) according to the type of school they attend, and that these status evaluations are based on racial traits.

We draw on the status construction theory, which explains how phenotypic characteristics work as cues for racial classification (Berger and Fišek 2006). Status cues can be classified on two dimensions: (1) indicative-expressive and (2) task-category (Fišek, Berger, and Norman 2005). The first dimension is concerned with how status information is communicated: indicative cues explicitly identify or label a person as possessing some status (e.g., a diploma); expressive cues are implicit, so they provide indirect status information (e.g., skin color). The second dimension considers what status information is communicated: task cues inform “what these people can do”; categorical cues communicate “who these people are” (ethnicity, race, or class). Thus, facial appearance works as an expressive-categorical status cue, which also “affect the formation of expectation states in an orderly way: more highly-valued categorical cues lead to high expectations for those actors displaying them” (Fišek et al. 2005:83).

Racial stereotypes emerge in the intersection of race and class. The negative image of dark-skinned people relies on their disproportionate presence in deprived classes. Institutional mechanisms cause this segregation, as well as discriminative practices that became common sense (Mulvey and Richards 2007). In Chile, a powerful class-specific status cue is ancestry (Núñez and Gutiérrez 2004). However, little is known about the role of racial traits because racial biases have traditionally been neglected by Chilean scholars. According to Barandiarán (2012), this denial shows contradictions of Chilean society and raises new questions about race and racism. Until recently, many studies in Chile (e.g., Bravo, Sanhueza, and Urzua 2008) hypothesized that class discrimination is more relevant than racial discrimination. This is not a research bias restricted to Chile. In other Latin American countries, scholars tend to prefer class over race when explaining the type of stratification prevailing in the region (Telles and Flores 2013).

This emphasis on class and the consequent denial of race has consolidated a race-blind ideology, which has been promoted by the state in the majority of Latin American countries, including Chile (Sue 2011; Warren 2015). According to this ideology, the intensive miscegenation, which has occurred in Chile since the colonial period, dissolved most racial differences and produced “one of the most uniform races of the entire world” (Walsh 2015:623). This denial of racial diversity in Chile, as well as the preference given to whiteness, have been well documented by historians (Walsh 2015), sociologists (Staab and Maher 2006), and psychologists (Uhlmann et al. 2002). Although the Chilean population is genetically diverse (Rothhammer and Llop 2004), the majority self-identify as white (Lizcano 2005). This racial bias manifests in strong preferences for light-skinned Chileans, even among those who self-identify as dark-skinned (Uhlmann et al. 2002).

We aim to deepen our understanding of status evaluations based on racial traits in the Chilean school system. Given the high level of segregation in the Chilean school system, we use school type as a proxy for class. Specifically, we explored
whether school categorizations of unfamiliar faces induce different status evaluations of wealth and moral worth, and whether these categorizations evoke racial bias. To do this, we carried out two studies. First, we explored social categorizations and appraisals of wealth and moral worth among first-year undergraduate students using 30 portraits of real high school pupils’ faces as visual stimuli (Study 1). To observe racial bias, we analyzed whether the previous categorizations and status evaluations correlated with a racial categorization performed by an independent panel of Chilean social scientists (Study 2). In doing so, we aimed to tackle an overlooked topic in Chilean social science: intersections between the stratification system, status evaluations, and race in the segregated Chilean school system.

HISTORICAL PERSPECTIVE

The Chilean racial picture was shaped by the encounter of three well-differentiated groups: whites, mostly Spaniards; indigenous from different ethnicities; and, although official history has hardly recognized it, blacks brought from Africa by the Spanish Empire (Contreras 2011; Invernon and Guizardi 2014). Interestingly, the relationships between these groups have fluctuated throughout Chilean history. Indeed, it is possible to identify three different moments regarding racial relations in Chile. First, during the colonial period, we can identify spaces of segregation and violence, and also instances of integration and peace. Thus, while the Mapuches were violently treated in the “conflict zone” (in the Arauco Province), in the Central Valley, there were institutions such as religious brotherhoods (cofradías) that offered social integration and class mobility to indigenous and mestizo people (Valenzuela 2010). This twofold reality aimed to reassure the privileges of white Spaniards by dealing either violently or peacefully with the claims of the majoritarian non-Spaniards groups. Something similar occurred to blacks. Although many were enslaved, it was possible during the eighteenth century to find black and mulatto craftsmen who, because of their prestige, could enjoy a relatively better economic situation (Contreras 2011).

A second moment comes after the independence war, when the new Chilean elite used indigenous icons as symbols of resistance against the Spanish legacy. Also, many mulatto and black craftsmen took advantage of that moment to consolidate their social prestige belonging to the new national army (Contreras 2011). In this context, Ercilla’s views on Mapuche bravery (Lipschütz 1967) were employed by the army to create a national myth and facilitate the integration of indigenous people into their ranks (González 2007). This national myth peaked during the War of the Pacific (1879–1883), wherein the idea of Chilean superiority (Arellano 2012) given its uniform, homogeneous race, was based on a mestizo stereotype that combined the indomitable spirit of Mapuche people and the civility of Europeans (Walsh 2015). This ideology recognized the value of indigenous courage but only after domestication either under army discipline (González 2007), or civilized thanks to the European, white heritage (Walsh 2015). Although this new narrative sought to leave behind the colonial past, the prevalence of white people at the top of the social hierarchy was never disputed. Consequently, while the racial
homogeneity of the nation was defined as *mestizo*, it also identified with phenotypic traits of *whiteness*. This myth of racial homogeneity, in which the presence of indigenous or blacks was widely neglected (Invernon and Guizardi 2014), permeated Chilean historiography during the mid-twentieth century and was popularized through the work of the historian Encina (1940), acquiring gravitas and respectability on average Chileans. It is true that this racial myth consolidated in a country with more than three centuries of racial miscegenation. Nonetheless, there was one exception: white elites did not participate in this racial miscegenation. For over a century, the Chilean “aristocracy” had an implicit rule: they were open to marriage with non-elites who had not participated in mestizaje—those who, even if poor, had just arrived from Europe (Collier and Sater 2004). Thus, in choosing a marriage partner, whiteness mattered more than class to Chilean elites.

Third, the myth of Chile as a racially homogeneous society is currently being questioned. The multiculturalist turn, the arrival of black and mulatto immigrants, as well as Mapuche claims in the “conflict zone,” have blurred this myth (Invernon and Guizardi 2014; Richards 2010). Although these transformations have made visible the presence of black and indigenous communities in Chile, it has not been without problems. The rejection of migrant flows and the criminalization of Mapuche by the state and southern elites (Richards 2010) have invoked a threatening image of non-mestizo and nonwhite Chileans.

Overall, this historically constructed racial myth has concealed the wide spectrum of skin tones present in Chilean everyday life; it has also hidden the ways in which these racial features superpose social class; and, more importantly, it has obscured the race discourses and practices of those who discriminate and transform race into *racism*—that is, into essentialist representations of race used to sustain power over others. The construction of race in Chile forms the racial stereotypes present in the Chilean segregated school system.

**THE CHILEAN SCHOOL SYSTEM**

In segregated contexts—where social groups are unevenly distributed among geographical or organizational units and members of different groups experience little contact (Skogan 1995)—such as the Chilean school system, individuals are exposed to stereotypical ideas about the distant others, so racial bias might become common sense.

In 1981, the Chilean school system was reformed in the context of market-oriented transformations implemented by a civic-military dictatorship. These reforms introduced a universal per-student voucher mechanism and created a new sector: private-voucher schools. This incited a massive reallocation of students from the public to the private-voucher sector (today accounting for 55% of total enrollments); students who are, on average, of higher socioeconomic status (SES) than those who remained in the public sector. Until the latest education reforms in 2015, private-voucher schools could be for-profit organizations, having wide latitude regarding student selection, and since 1994, could charge “add-on” fees to supplement the government voucher. The 1981 education reform also transferred public
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school management to municipalities. The municipal sector (around 38% of total enrollments nowadays) supplies the last resort: they cannot charge tuition or turn away students. Without public funding, the private-fee sector continues to serve a small group of high-income families (around 7% of total enrollments); their fees are, on average, five times the per-student voucher (Mizala and Torche 2012).

This institutional design resulted in high SES segregation of students (Elacqua 2012), with a Duncan Index estimated in the range of 0.50–0.60 in 2008 (Valenzuela, Bellei, and Ríos 2014). Unsurprisingly, given their class composition, schools perform very differently in national standardized tests, with municipal schools performing the worst and private fee-paying schools presenting the better scores (Ministerio de Educación 2014).

Middle-income families generally show a preference for private-voucher schools (especially for those charging add-on fees) over municipal schools (Canales, Bellei, and Orellana 2016). Middle-income families justify this preference based on a combination of status and moral reasons: they try to avoid poor schools—considered risky, populated by kids with weak self-control, and from families with questionable moral fiber—and value schools that offer strong disciplinary control and similar SES composition. Thus, middle-income families tend to discard municipal schools and search for socioeducational segregation.

Therefore, the type of school a pupil is attending might constitute a diffuse status characteristic (Berger and Fişek 2006; Fişek, Berger, and Norman 1995), because parents in Chile hold differential status evaluations for pupils attending different types of schools, with private fee-paying (and to a lesser extent, private-voucher) schools having more social value than municipal schools. Chilean parents often assume that private fee-paying (and to a lesser extent, private-voucher) pupils are more capable in a wide range of valued tasks and activities (e.g., self-discipline, educational achievement). Thus, the transformations of the school system in Chile have produced a prestige order in which pupils could be differentiated by the status of their school. However, the extent to which this status order superposes racial features is unknown. It is reasonable to hypothesize that this superposition does exist—that is, individuals’ status evaluations of pupils are based on racial traits.

Recent research has uncovered different ways in which racial and ethnic biases operate in the Chilean school system. Webb and Radcliffe (2015) studied how whiteness permeates and even builds the organizational space of the school in indigenous-majority (mainly rural) areas in Chile. According to their analysis, “school teachers and pupils in these contexts are unwilling to recognize racism, instead normalizing pervasive and unacknowledged whiteness which appears to be race-neutral” (Webb and Radcliffe 2015:114). Meeus (2014) investigated the effects of skin tone and related stereotypical educational beliefs. Her results indicate the presence of educational expectation bias based on skin tone: dark-skinned pupils are expected to have lower academic achievement, compared to those with lighter skin, a bias that persists even after controlling for pupils’ previous educational attainment and social class. Hence, there is evidence that racial bias is present in the Chilean school system. However, these recent studies on race and schools in Chile have been restricted to either rural areas or teachers’ beliefs and practices. We explore a related topic: the implicit intersections of social categories, status evaluations, and
racial traits that young people establish when categorizing pupils within the Chilean school system.

OVERVIEW OF THE CURRENT RESEARCH

Two hypotheses directed our research. First, we expected that first-year undergraduate students can categorize unfamiliar portraits of school pupil faces (the stimuli) according to the three types of schools in the Chilean school system. Given the highly segregated school system in Chile, these categorizations should mirror the socioeconomic structure of Chile (i.e., the type of school is a proxy for pupils’ SES). The types of schools we use as social categories are municipal, private-voucher, and private fee-paying schools. Also, we expected that these categorizations were associated with varying status evaluations, specifically, evaluations of pupils’ perceived wealth and moral worth. Thus, we predicted participants could make different status appraisals of wealth and morality based on high school pupils’ facial appearance. We evaluated this first hypothesis (i.e., Hypothesis 1) in a repeated-measure design in which the same participants evaluated the same stimuli (Study 1).

Second, we predicted that young participants express racial bias when categorizing unfamiliar pupils’ faces as described in the previous hypothesis—that is, they use the racial traits of the faces as an expressive-categorical status cue of the pupil to ascribe him or her to a certain type of school. Thus, given the indigenous social disadvantage and white social advantage observed in Chile, we expected that faces categorized as municipal school (lower SES) would also be categorized as American (or of darker skin tone). We also anticipated that faces categorized as private fee-paying school (higher SES) by young participants would be categorized as white (or lighter skin tone). We expected that faces categorized as private-voucher school would be more racially heterogeneous or diffuse, because most Chilean pupils are enrolled in this type of school. We evaluated this second hypothesis (Hypothesis 2) by asking a panel of Chilean social science researchers to classify the stimuli into different racial categories, and correlated this with the categorizations made by our sample of undergraduate students (Study 2).

Two methodological decisions were made in this research, both based on the “availability heuristic” (Tversky and Kahneman 1973; Wänke, Schwarz, and Bless 1995). This concept proposes that the phenomenal experience of recall serves as a source of information in making probability judgments. In person perception, individuals categorize strangers into groups based on discernible cues, meaningful according to available mental representations. Once these representations are activated, so are their associated mental contents. Thus, first, we framed and situate Study 1 within the Chilean school system given its well-known SES segregation. This allowed us to use and activate the same categories in participants: the type of school in which the pupil in the stimuli is enrolled. Second, because the notions of race and racial bias have been historically, politically, and even scientifically neglected in Chile, we assumed that racial groups might not be available categories for our young participants, who might understand these categories in idiosyncratic and ambiguous terms. We also assumed that racial categories are available for
Chilean social scientists. Hence, we asked a panel of Chilean researchers (trained raters) to categorize the portraits into racial groups.

**STUDY 1: SOCIAL CATEGORIZATION AND STATUS EVALUATION**

*Setting*

We designed an Internet-based computer system to elicit and register participant responses. Four sessions were carried out in three Chilean cities: Santiago (two sessions), Viña del Mar, and Temuco. We chose these urban regions because of their high concentration of universities and their different ethnic composition (e.g., Temuco is the main city of Araucania Region, the historic territory of the Mapuche population). The sessions occurred in the computer labs of four universities (two in Santiago). One member of our research team led the sessions and answered participants’ questions. Instructions were also displayed on screen.

*Visual stimuli*

Portraits of high school pupils’ faces were taken for this research during the national college admission test (Prueba de Selección Universitaria [PSU]), the entry test required for last-year high school students who wish to attend college. A photographer visited three official venues in Santiago where students were taking this test. The photographer requested volunteers, men and women 18 years old, who just finished secondary education, to have their picture taken for a scientific research on “Person Perception and Social Classification,” to be conducted at the correspondence author’s university. Students interested in participating had to sign an informed consent. The photographer asked models to maintain an emotionally neutral expression.

From all the pictures taken, 30 images were selected under three criteria: (1) presenting a directly oriented face; (2) representing the phenotypic variability present in daily life; and (3) 15 of them were women (50%). Because we wanted to elicit the mental representations of our young participants about real high school pupils, as they represent their self in natural conditions, we did not exclude images with facial alterations (such as jewelry, glasses, caps, visible makeup, or hairstyles). The images were removed from their original context and placed onto a neutral background (see Fig. 1). To preserve anonymity, none of the models’ identity were registered or disclosed to participants (double-blind procedure).

*Procedure*

We performed a repeated-measure design in which all subjects judged the same pictures (i.e., random subjects are crossed with the stimuli). Additionally, the stimuli were nested within one of the three types of schools. Participants completed a sociodemographic survey to obtain information regarding age, gender, ethnicity, municipality of residence, and maximum level of education reached by the head of
household. Then, participants were instructed they would view 30 images of unfamiliar high school pupils’ faces on the computer screen and would be requested to classify and judge each of these portraits. Participants were requested to “guess” (i.e., impute) the type of school each pupil was attending. Four alternatives were offered during the guessing task: “municipal,” “private-voucher,” “private fee-paying schools,” and “cannot tell.” Also, each image was evaluated in nine attributes presented on a semantic scale between two bipolar adjectives of opposite meaning. Thus, for each word pair attribute, participants were asked to rate the

Fig. 1. Thirty Portraits of High School Pupils Were Used as Stimuli in the Current Research. The Identification Codes for All Faces Are Also Displayed.
photographs based on a five-point scale, from −2 to +2, by choosing the word on the left (which was the negative adjective, coded as a rating of −2), the word on the right (which was the positive adjective, coded as a rating of +2), or some value in between, 0 included (which represented the neutral rating).

Once the guessing task was completed for one face, the system allowed the participant to continue to the next. A counter indicating how many images remained to be evaluated was always displayed on screen. To reduce “carryover effects” typical of repeated-measures designs, participants rated and categorized stimuli presented in a random order. Most participants completed the activity within 35 minutes.

Participants

First-year undergraduate students (N = 120) were recruited through invitations to take part in a study on “Person Perception and Social Classification” sent to their personal e-mails. To motivate attendance, we raffle among participants of each session a gift card valued in $15,000 Chilean pesos (US$25 approximately) from a bookshop chain company present in the three cities. Data from five participants were excluded from the analyses because they did not complete the whole study. The final sample included 47 students from Santiago (40.8%), 38 from Viña del Mar (33%), and 30 from Temuco (26.1%). Participants’ mean age was 19.43 years (SD = 1.78) and 66 were women (57.4%). Only 10 participants (8.7%) declared themselves Mapuche. To assess participants’ SES, we used municipality of residence as a proxy of family background, given the high degree of residential class-segregation in Chile (Sanhueza and Larrañaga 2007). To compute an overall measure of participants’ SES, we standardized and averaged participants’ head of household education attainment and municipality of residence’ mean income.

Results

To classify each portrait in one category of school, we used the mode of the participants’ categorizations. Therefore, the stimuli included nine pictures categorized as “municipal,” 11 as “private-voucher,” and 10 pictures categorized as “private fee-paying.” Results show that from the 30 pictures, two pupils’ faces were categorized as fee-paying by most participants—namely, VAH022 (83.19%) and VAM028 (81.36%). Additionally, two pupils’ faces were categorized as municipal: LGH002 (77.39%) and SCM018 (75.65%). Finally, the high consensus observed in the categorization of some faces for municipal and fee-paying schools was not observed in the category private-voucher school. The only pupil’s face that reached some degree of consensus among participants was LGMA009, categorized as enrolled in a private-voucher school by 67.24%, and LGH003, categorized with the second highest value in private-voucher (50%). The widely shared categorization in municipal and private fee-paying schools for a reduced group of faces suggests some common and discernible facial traits mainly present in these few portraits (see Study 2 below).
We coded the word pair attribute ‘poor–rich,” as an evaluation of status in terms of perceived pupils’ wealth. The other eight attributes were coded as emotional judgments of pupils’ faces. A common factor analysis was conducted on these eight attributes (principal axis as the extraction method for the factors with varimax rotation), to reduce the number of variables. Two orthogonal factors were retained. Judgments of trustworthiness, generosity, kindness, and honesty were strongly correlated with the first factor, termed righteousness. This factor accounted for 39.04% of the variance and its internal consistency was very high (Cronbach’s $\alpha = 0.903$). The second factor, termed dominance, was strongly correlated with judgments of toughness, strength, activeness, and dominance. This factor accounted for 31.01% of the variance and its internal consistency was high (Cronbach’s $\alpha = 0.794$). The two factors identified in the analysis are intuitively appealing, and their importance is consistent with standard theories of face evaluations in person perception (Oosterhof and Todorov 2008). Information of factor loadings after rotation can be found in Table AI (Appendices). Finally, each picture’s average factor score was calculated using the Anderson-Rubin method for all responses ($N_{responses} = 3,452$). Thus, we used three (dependent) variables as participants’ evaluations of pupils’ faces: wealth, righteousness, and dominance. The first status evaluation corresponds to a global appraisal of perceived wealth; righteousness and dominance correspond to global and emotional appraisals of moral worth.

Tests of Stated Hypothesis

Hypothesis 1 predicted that participants would make different wealth appraisals and emotional evaluations of moral worth of pupils’ faces according to which type of school they were categorized. To determine whether the ratings participants gave in these attributes were different for faces categorized as enrolled in different schools, we analyzed participants’ responses in linear mixed models. These models are recommended in repeated-measures designs, where the resulting scores are expected to be related because they come from the same participants (Judd, Westfall, and Kenny 2012). Consequently, we included random effects to account for the patterns of non-independence present in the data, although the fixed effects are associated with the factors of substantive interest that motivated data collection.

We fitted three mixed linear models, with wealth (Model 1), righteousness (Model 2), and dominance (Model 3) attributes as the models’ outcome variables ($Y$). In these models, participants $i$ and stimuli $j$ were treated as random because these factors are random samples of larger populations, and the three school categories $C$ were treated as fixed ($\beta_1 C_{ij}$) because the three levels of this factor are exhaustive. In these mixed models, the intercept had two random components, one varying from stimulus to stimulus ($\sigma_{0j}^2$) and one varying from participant to participant ($\sigma_{0i}^2$) within treatment conditions (i.e., “type of school”). These random components allow for some participants to give higher scores on average than others, and some stimuli might elicit higher scores on average. The slope for the treatment variable had only one random error component, varying across participants ($\sigma_{1i}^2$). Also, we tested for the potential covariance between the random participant
intercept effect and the participant slope effect (e.g., participants with high intercepts might have low slopes). We controlled for some participants’ attributes X—namely, participants’ gender, SES, and the city where the session was carried out, which were treated as fixed factors in the model. Finally, to avoid overspecification of the model, we chose to code type of school as “1” for Municipal, “2” for Private-Voucher, and “3” for Private Fee-Paying schools, so that the intercepts in the model estimate the mean across imputed types of schools. These models are given as

\[ Y_{ij} = \beta_0 + \beta_1 C_{ij} + \beta_2 X_{ij} + \mu_0 + \mu_i + \mu_j + \epsilon_{ij} \]

Results indicate that at the portraits level, wealth appraisals were weakly correlated with righteousness \((r = .12; p = .513)\) and dominance \((r = -.016; p = .931)\). Table I illustrates a summary of the results from the three linear mixed models, including parameter estimates, results of likelihood-ratio tests on each of the random effect variances, and \(t\)-statistics. Results of Model 1 indicate statistically significant differences in the mean scores obtained by each category of school in the wealth attribute \([F(1, 39.564) = 92.967, p < .001]\). The regression coefficient for type of school in Table I reveals a positive effect in the participants’ appraisals of pupils’ wealth. Thus, pupils categorized as attending private-fee paying schools scored around one and a half points higher than pupils categorized as enrolled in municipal schools, above and beyond participants’ gender, SES, and the city where the sessions were carried out. Participant’s gender had a negligible and nonsignificant effect on appraisal of wealth \([F(1, 111.049) = 0.85, p = .771]\). Also, participants’ SES did not affect status evaluations of wealth \([F(1, 111.069) = 1.407, p = .238]\). Finally, we did not observe significant differences among cities where the sessions were carried out \([F(1, 111, 061) = 0.358, p = .551]\). Thus, there is evidence that pupils’ faces categorized according to different types of schools reach very different scores in perceived wealth.

In contrast, results of Model 2 and Model 3 in Table I suggest there are no important differences in the mean scores obtained for each category of school in righteousness (Model 2: \(F(1, 36.650) = 0.198, p = .659\)) nor in dominance (Model 3: \(F(1, 30.567) = 0.424, p = .520\)), which correspond to participants’ status evaluations of pupils’ moral worth. On the other hand, for these two evaluations, only participants’ gender had a negative effect in appraisals of pupils’ faces for righteousness (Gender in Model 2: \(F(1, 110.992) = 6.017, p = .016\)) and dominance (Gender in Model 3: \(F(1, 110.988) = 5.751, p = .018\)). Thus, the regression coefficients in Models 2 and 3 indicate that male participants tend to give lower scores in status evaluations of pupils’ moral worth, compared to the scores female participants give in these dimensions.

Figure 2 depicts the estimated marginal means for each type of school—that is, the mean scores and confidence intervals for each type of school, adjusted for the other variables in the models, including perceived wealth, righteousness, and dominance. The top plot in Fig. 2 clearly shows that differences in wealth are inferred by participants from the facial appearances of pupils attending each type of school. However, there are no differences in the righteousness (middle plot in Fig. 2) nor in the dominance (bottom plot in Fig. 2) evaluations done by participants regarding
pupils attending each type of school. Hence, Fig. 2 suggests participants reproduced stereotypic representations of pupils (supposedly) attending municipal, private-voucher schools, and private fee-paying schools; stereotypes associated private fee-paying schools to facial traits perceived as wealthier, compared to faces categorized as studying in municipal schools. Nevertheless, participants do not differently evaluate moral worth of pupils attending different types of schools.

In synthesis, the mixed linear model results suggest that individuals’ categorizations and status evaluations of high school pupils’ facial appearance allow them to situate pupils in the Chilean social structure in a consistent way. There is a clear linear trend in the status evaluations that participants make for different categories of schools: high school pupils who, based on their facial appearance, are categorized as “municipal students” score lower in their perceived wealth than high school pupils categorized as “private-voucher students”; and the latter group, in turn, score lower in perceived wealth than those high school pupils categorized as “private fee-paying students.” Interestingly, these linear trends are not observed in evaluations of pupils’ moral worth for each type of school. However, are the inferences of the pupils’ economic status also based on pupils’ racial traits?

### Table 1. Mixed Model Results of Status Evaluations of Wealth (Model 1) and Morality (Model 2 and Model 3)

<table>
<thead>
<tr>
<th>Random effects</th>
<th>Wealth (1)</th>
<th>Righteousness (2)</th>
<th>Dominance (3)</th>
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<tbody>
<tr>
<td></td>
<td>Estimate</td>
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<td>t</td>
</tr>
<tr>
<td>Participants ($\sigma^2$)</td>
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<tr>
<td>Intercept</td>
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<td>-2.45</td>
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<td>-2.45</td>
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<td>Stimuli ($\sigma^2$)</td>
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<tr>
<td>Intercept</td>
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<td>Fixed effects ($\beta$)</td>
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<td></td>
</tr>
<tr>
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<td>16.49</td>
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<td>-1.19</td>
</tr>
<tr>
<td>City (Temuco = 0)</td>
<td>0.03</td>
<td>0.06</td>
<td>0.59</td>
</tr>
<tr>
<td>(-2 \text{ log likelihood})</td>
<td>7,904.473</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *$p < .05$, **$p < .01$; ***$p < .001$; Standard errors in parentheses.
Fig. 2. Estimated Marginal Mean Scores Obtained by Each Category (Type of School) of Faces in the Status Evaluations of Wealth (a), Righteousness (b), and Dominance (c). Error Bars Represent the 95% Confidence Intervals Around the Predicted Means.
STUDY 2: RACIAL CATEGORIZATION BY AN EXPERT PANEL

Setting

Although the previous analyses provide strong evidence that participants use pupils’ facial traits for categorization in the Chilean school system and evaluation of wealth in a consistent way, we do not know yet if there exists a racial bias underlying these categorizations and status evaluations. This is the main point of Hypothesis 2 but cannot be answered solely based on the data from our sample of undergraduate participants, as we did not request them to categorize faces according to race. The reason for not asking participants about race is given by the race-blind ideology present in Chile, which neglects the concept of racial differences and makes them not readily available categories for most Chilean people, as discussed above (see Section I). This does not imply that Chilean students cannot perceive and signify racial differences in daily life. In fact, they use many social labels that one could consider as racial (e.g., “negro,” “indio,” “ruco”). However, they are not mutually exclusive, their meaning is highly context dependent and idiosyncratic, and they are not derived from a formal knowledge about race. So if we had requested participants to categorize the racial group corresponding with each face, it is highly probable that reliable differences could not be established among the portraits in terms of white, black, mestizo, or Amerindian.

To get around this problem, we asked an expert panel to categorize the race of each face. We surveyed a group of 40 Chilean social science researchers assuming that by their academic background, they can easily distinguish between blacks, indigenous, mestizo, or white persons. We invited 60 researchers to complete a questionnaire on “Racial Classification of Faces,” sent to their personal e-mails. To contact these researchers, we used a convenience sampling procedure: the list of e-mails was built by merging different contact lists of researchers to which authors had access through their universities. Instructions to fill out the questionnaire were provided in the e-mail. The researchers had to download the questionnaire, complete it, and send it back to the authors’ personal e-mails.

Participants

Forty completed questionnaires were returned (66.7% response rate). Our final panel was composed of nine women (22.5%). Regarding their academic degrees, 12 doctorates, 22 masters, and six bachelors formed the sample. In terms of their disciplines, the panel had eighteen sociologists, one anthropologist, six political scientists, three economists, six historians, one psychologist, and four researchers from other disciplines. Their mean age was 35.8 years with a range from 25 to 70.

Procedure

The expert panel categorized the same 30 portraits used in the first study. They were asked to choose the race group that best represented the pupil depicted in the image. In doing so, they could choose among seven categories: Amerindian, Asian,
white, mestizo, mulato, black, and Cannot Tell. We selected these categories because they constituted the main racial groups present in Latin America (Lizcano 2005). We defined mestizo as the product of an interracial relationship between a white and an indigenous person, and mulato as the child of a black-white couple. We also asked researchers to self-classify themselves according to the same six racial categories.

Results

Using the most frequent category—the mode—for assigning a racial group to each portrait, the two main groups of our sample were mestizo and white, with 46.7% and 40%, respectively. In the third place, a very small percentage of faces (6.7%) were categorized as Amerindian by the expert panel. Finally, only 3.3% of the faces were categorized as Asian and blacks, so we decided to combine both categories into one, called Other Races.

Tests of Stated Hypothesis

Hypothesis 2 predicted that first-year undergraduate students in Chile express racial bias when categorizing and evaluating the social status of unfamiliar pupils’ faces as studying in different types of school, associating Amerindian or mestizo phenotypes to municipal schools (lower SES) and white phenotypes to private fee-paying schools (higher SES). To test this hypothesis, we took the two most representative faces (one man and one woman) of each type of school according to the students’ opinion (see Study 1 above), and then observed racial categories were assigned by the expert panel. Figure 3 shows the results of this analysis. There is a clear pattern in the interaction of these two variables, that is, type of school and race. Thus, the two faces (VAH022 and VAM028) selected by the students as most representative of private fee-paying schools were categorized by most of the expert panel as white. Then, the two (LGM009 and LGH003) most representative faces of private-voucher schools were categorized as mestizo by more than a half of the experts. And finally, the two (LGH002 and SCM018) most representative faces of the public sector (i.e., municipal schools) were the only two whose modes were Amerindian. Hence, a plausible association exists between race and social class (identifying here as the type of school the pupil is supposedly attending), which gives rise to the racial stereotyping observed in this study.

To further our previous analysis, we compared two groups: whites and mestizo-Amerindian faces. We merged these last two categories into one category, as both are far from the whiteness ideal prevailing in Latin America (Telles and Flores 2013). We excluded blacks and Asians because these racial groups represent a low percentage of the Chilean population (Lizcano 2005). To make this comparison, we used the mean score of each face in six different indexes: perceived wealth, righteousness, dominance, private fee-paying, municipal, and private-voucher schools. Wealth, righteousness, and dominance correspond to the mean status evaluation on
the same name variable in Study 1, and the last three indexes represent the percentage of participants in Study 1 who categorized the faces as attending municipal, private-voucher, or private fee-paying schools.

As Table II shows, there is a tendency to associate perceived white faces with richer and private fee-paying school students. On the other hand, Amerindian or mestizo faces tend to be perceived as poorer and municipal or private-voucher school students. However, on the other indexes, the differences among groups are smaller and not statistically significant. Hence, the relationship stated in Hypothesis 2 among type of school, status evaluations, and perceived race gives rise to a

---

**Table II.** Comparison Between Whites and Mestizo-Amerindians

<table>
<thead>
<tr>
<th>Racial Group</th>
<th>Whites Mean</th>
<th>Mestizo and Amerindian Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealth</td>
<td>.75&lt;sub&gt;a&lt;/sub&gt;</td>
<td>-.15&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Righteousness</td>
<td>-.09&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.07&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Dominance</td>
<td>.13&lt;sub&gt;a&lt;/sub&gt;</td>
<td>-.12&lt;sub&gt;a&lt;/sub&gt;</td>
</tr>
<tr>
<td>Municipal</td>
<td>.11&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.37&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Private-voucher</td>
<td>.27&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.42&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
<tr>
<td>Private fee-paying</td>
<td>.51&lt;sub&gt;a&lt;/sub&gt;</td>
<td>.09&lt;sub&gt;b&lt;/sub&gt;</td>
</tr>
</tbody>
</table>

*Note: The two groups in the same row that do not share the same sub-index are significantly different according to the Mann-Whitney U test (*p* < .05).*

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**Fig. 3.** Racial Categories Assigned by the Expert Panel to the Two Most Representative Faces by Type of School.
complex stereotype that does not only focus on the six most archetype faces analyzed above (see Fig. 3).

As Telles (2014) has claimed, continuous measures are better than categorical ones for understanding racial hierarchies in this subcontinent. Given the extensive process of miscegenation that occurred in the region, there exists a broad range of phenotypes whose influence on social stratification is better comprehended considering race as a gradient variable constructed around the nonwhite/white axis. Thus, we constructed a new variable that measures the degree of consensus around the “whiteness” of each face in the stimuli, made considering the percentage of experts who categorized a given face as white. It varied between 0 and 1, and we called it Whiteness Index. The reason for including it in our analysis was to know how strong, if it exists, is the relationship among the whiteness attributes perceived on the pupils’ faces and the variables considered in the previous analysis. The correlation analyses in Table III indicate the association among Whiteness Index, wealth, and type of school are as expected. As more researchers categorized a given face as white, more undergraduate participants attributed it a wealthier status and private fee-paying school. In contrast, as fewer scholars categorized a given face as white, more participants in Study 1 believed that this face belonged to a poor, municipal school student. As in Table II, the relationship between whiteness index and moral attributes (righteousness and dominance) is not statistically significant, although in the expected direction.

Thus, while there are small size effects for the differences among whites and nonwhites (Table II) and for the correlation coefficients (Table III) between whiteness and moral attributes, the cultural meanings of whiteness in Chile could still explain the direction of these effects. Namely, as whites have been the ruling group since colonial times (Barandiarán 2012), it is not strange that participants “see” whiter portraits as more dominant and less righteous than dark-skinned portraits. However, we emphasize that these effects are still small and not significant, so we cannot rule out the possibility that our research, due to sample size, lacked the statistical power to detect these effects.

Finally, to evaluate the strength of the main correlations reported above, Fig. 4 depicts four dispersion graphs and reports their linear $R^2$. The first plot (upper left) shows the relationship between whiteness and municipal indexes. Indeed, the Whiteness Index explains 43.9% of its variances. However, there are a few outliers (LGH002, SCM018, LGH005, and VAH0021) that weaken this association. The

<table>
<thead>
<tr>
<th></th>
<th>Pearson’s Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wealth</td>
<td>.79**</td>
</tr>
<tr>
<td>Righteousness</td>
<td>-.19</td>
</tr>
<tr>
<td>Dominance</td>
<td>.21</td>
</tr>
<tr>
<td>Municipal</td>
<td>-.66**</td>
</tr>
<tr>
<td>Private-voucher</td>
<td>-.41**</td>
</tr>
<tr>
<td>Private fee-paying</td>
<td>.84**</td>
</tr>
</tbody>
</table>

**$p < .01$ (bilateral).
second plot of Fig. 4 (upper right) depicts the strongest correlation of the whiteness index to any other dependent variable. Precisely, the first explains 70% of the private fee-paying index’s variance; the third (bottom left) shows the relationship between whiteness and private-voucher indexes. Although significant, it is not very strong: the Whiteness Index explains only 16.5% of the private-voucher’s variance, suggesting that private-voucher schools are the most racially heterogeneous type of school. With respect to status evaluations of wealth, the fourth plot (bottom right) shows a positive correlation between this variable and whiteness index. In this case, the latter explains a large proportion of perceived wealth variance (63.4%).

The resulting plots (Fig. 4), along with the other statistical analyses presented prior, strongly support Hypothesis 2. In synthesis, there seems to be a powerful association between the racial appearance of the pupils and the type of school they are
perceived to attend. Chilean high school pupils who appear as Amerindians or mestizos are perceived as probable municipal school students, while their private fee-paying pairs are associated with the white phenotype. As we expected, the linkage between racial appearance and assumed private-voucher students is weaker, because this type of school is socioeconomic and, consequently, racially heterogeneous in Chile.

**DISCUSSION AND CONCLUDING REMARKS**

The results of the two studies conducted in this research suggest individuals in Chile are not only consistent in attributing the type of school—a diffuse status characteristic—that an unfamiliar high school pupil is attending, based solely on appraisals of their facial traits, but also this consistency in attribution involves stereotyping status evaluation of wealth (but not of righteousness and dominance) and racial bias, because different status evaluations of wealth correlate with the “whiteness” of the pupils’ faces. These results suggest that the historical development of the Chilean society and its school system has produced a prestige order in which pupils are differentiated by status characteristics according to the type of school they attend.

Two different but interwoven effects were detected. First, by asking undergraduate students to categorize unfamiliar portraits of high school pupils according to the three types of schools present in Chile, they could also attribute the wealth of pupils based on their facial traits. However, perceived SES boundaries in Chile do not correlate with perceived moral worth, measured here as emotional judgments of righteousness and dominance. Second, the joint analyses of our undergraduate participants’ responses and the expert panel racial categorization uncovered an interaction of three different elements: attributed SES (in terms of what type of school the faces were categorized), status evaluations, and racial bias. Faces categorized as enrolled in municipal schools were also judged with lower status of wealth and with Amerindian or mestizo racial traits (i.e., dark skinned, dark hair, brown eyes), while faces categorized as attending private fee-paying schools were also judged with higher SES and with white racial traits (i.e., light skinned, blond hair, blue eyes). Taking together, these results emphasize the importance of the concept of race and racial differences in Chilean society and Latin America in general. As discussed earlier, Latin American scholars are still reluctant to recognize that race plays a major role in their societies, and they often attribute evidence of a racial hierarchy to social class.

From a policy point of view, these results might help to envisage symbolic barriers for the latest education reforms of 2015 in Chile, the so called Inclusion Law, which drastically modified the institutional design of the school system. These reforms aimed to overcome the traditionally market-oriented model for the provision of educational services, which put an end to cofunding of publicly supported schools by parents, student selection, and profit making in private-voucher schools. However, because parental school choice is still guaranteed, the widespread differential status construction and evaluation of municipal and private-voucher schools, found in this research, cast doubts on the effectiveness of these reforms, at least in
the short term. White middle-class families might still prefer private-voucher over municipal schools, given their status implications.

Some caveats deserve mention. Our research design asked participants to judge and evaluate pupils’ faces in laboratory conditions (Study 1). In a nutshell, responses were gathered in rather artificial, although “optimal,” conditions. Some authors have claimed that in most “real world” situations such optimal conditions are very difficult, if not often impossible, to establish when studying intergroup dynamics such as stereotypes and racism (Dixon, Durrheim, and Tredoux 2005). Thus, for instance, it might be argued that our results merely confirm that participants engage in stereotyping and racial bias when they are invited to do so under nonrealistic conditions.

There are two reasons to argue that such a claim is not warranted. First, we followed standard protocols of repeated measures designs (e.g., randomization of stimuli across participants), we gathered responses in three different geographical locations and four different universities (i.e., increasing external validity), and we used appropriate data analysis techniques for repeated measure designs (i.e., mixed linear models to account for potential dependencies in participants’ responses). Second, although participants’ status evaluations of wealth for pupils’ faces varied across different types of schools, indicating the presence of strong social class–related stereotypes and racial biases, we did not observe the same differences in status evaluations of moral worth (neither righteousness nor dominance). If the research design invited participants to engage in stereotyping, they would do it for all our dependent variables. We believe this is the case because our design captures within the lab a phenomenon that happens outside the lab: despite whiteness being differently linked to socioeconomic strata, race in Chile is not so informative of moral worth, as in other latitudes (Lamont 2002). We speculate that private-voucher schools, which have greatly contributed to the segregation of the Chilean school system (by pushing aside the poorest pupils toward the municipal sector and keeping the richest pupils in the private-fee paying schools), have notwithstanding provided a social space of encounter of different racial traits for children and adolescents. This early experience of racial diversity could allow, in turn, university students (our sample participants) to uncouple class and moral boundaries, although not race and class boundaries. All in all, “thicker descriptions,” achieved through qualitative research, are necessary to better understand the meanings of the reported stereotypes and racial bias in the Chilean school system. Our results are silent about those meanings. The findings presented here provide new directions for further research.

Race and ethnicity are fluid and multidimensional, so research on these topics must use a myriad of methodologies and measures to grasp these phenomena. Indeed, the literature includes different strategies for addressing race and ethnicity. For instance, census data in Latin America has included ethnoracial self-identification in recent years. While these data now allow researchers to examine long-denied race-based inequalities in Latin American countries, census ethnoracial identification is known to be ambiguous, variant across contexts, and potentially affected by other variables, including social class. More importantly, ethnoracial self-identification may not capture the way indigenous or afro-descendant people are perceived
and categorized by others, which is the focus of our article. According to Telles, Flores, and Urrea-Giraldo (2015:40), “since discrimination may be an important mechanism that leads to ethnoracial inequality in the current generation and because discrimination depends mostly on classification by others, self-identified race may poorly or incompletely estimate actual racial inequality.” Consequently, researchers also rely on third-party judgments (either trained or naïve raters), so racial stereotypes and discrimination practices can be captured. Telles and colleagues, for instance, developed an interviewer-rated skin color classification based on a color chart for their research on race in Latin American countries. In our research, we decided to use a third-party, professional panel of Chilean social scientists who categorized, ex post, the set of stimuli pictures, according to six racial groups. This classification allowed us to create two indicators regarding pupils’ facial appearance: first, a discrete measure of pupils perceived race and, second, a continuous, more fluid measure of pupils perceived whiteness.

The status hierarchy found in our study suggests that at the top, as well as the bottom, there are strong racial distinctions. However, participants’ categorizations and status evaluations of wealth become more diffuse in the middle. As Telles (2014) pointed out, racial stratification in Latin America is far from that of the United States. Instead of well-defined racial clusters—straightforwardly associated with social class—present in the latter, the former has gone through an extensive miscegenation process that has created a racial gradient with subtle differences. So the two extremes of this gradient (Amerindian and whites) are the most obvious and, consequently, strongly stereotyped. In contrast, the “middle” supposedly resembles the mestizo-looking type, but this varies greatly. Some are light skinned, but with indigenous facial traits, while others are dark skinned but with white facial traits. As we discussed above, since the colonial period, there have existed some social mobility for blacks, mulattos, and indigenous, who have achieved middle-class positions, sharing the same social space with light-skinned or white-looking Chileans. Therefore, the fact that the middle of the racial spectrum revealed by our study was more diffuse than the extremes is consistent with a Latin American particularity, for which Chile is not an exception.

Table A1. Varimax-Rotated Loading Factors on Eight Attributes

<table>
<thead>
<tr>
<th>Righteousness (Factor 1)</th>
<th>Dominance (Factor 2)</th>
<th>Communalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untrustworthy–Trustworthy</td>
<td>0.85</td>
<td>0.73</td>
</tr>
<tr>
<td>Selfish–Generous</td>
<td>0.84</td>
<td>0.70</td>
</tr>
<tr>
<td>Inconsiderate–Considerate</td>
<td>0.83</td>
<td>0.69</td>
</tr>
<tr>
<td>Dishonest–Honest</td>
<td>0.82</td>
<td>0.67</td>
</tr>
<tr>
<td>Fragile–Tough</td>
<td>0.79</td>
<td>0.63</td>
</tr>
<tr>
<td>Passive–Active</td>
<td>0.73</td>
<td>0.54</td>
</tr>
<tr>
<td>Weak–Strong</td>
<td>0.69</td>
<td>0.49</td>
</tr>
<tr>
<td>Submissive–Domineering</td>
<td>0.59</td>
<td>0.37</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>3.12</td>
<td>2.48</td>
</tr>
<tr>
<td>Variance Explained</td>
<td>39.04%</td>
<td>31.06%</td>
</tr>
<tr>
<td>Cronbach’s Alpha</td>
<td>.90</td>
<td>.79</td>
</tr>
</tbody>
</table>

*Loadings over .40 are shown.*
The inquiry of race in Chile and Latin America should not be done separately from class analysis, historical accounts, or confined to isolated rural areas where indigenous populations live. In this way, the results reported here also represent a first step toward leaving behind the myth of racially homogeneous population, whose consequences still represent a cognitive barrier to a deeper understanding of social stratification dynamics in Latin America. Despite its limitations, this research paves the road to overcoming all these difficulties.

APPENDIX

REFERENCES


Encina, Francisco. 1940. Historia de Chile Desde La Prehistoria Hasta 1891. Santiago: Nacimiento.


