

Out of the Picture: Latinx and White Male Youths' Facial Features Predict Their Juvenile Justice System Processing Outcomes

Crime & Delinquency
2021, Vol. 67(6-7) 787–807
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DOI: 10.1177/001128721999347
journals.sagepub.com/home/cad



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Abstract

Adults' facial characteristics predict whether and how severely they are sentenced in the adult criminal justice system. We investigate whether characteristics of White and Latinx male youths' faces predict the severity of their processing in the juvenile justice system. Among a sample of first-time offenders, despite no differences in the severity of their offenses, youth who were perceived by naïve observers as more dominant, less trustworthy, less healthy, and having darker skin were more likely to receive harsher sanctions. Thus, extralegal factors like appearance may bias legal decisions that place some youth at increased risk for more restrictive sanctioning. Our findings highlight the need for structured approaches to juvenile processing decisions that take youths' appearance out of the picture.

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Keywords

face perception, juvenile delinquency, stereotypes, colorism, legal sanctions

Individual perceivers routinely use appearance-based features to infer information about a person's inner character and traits (see Gheorghiu et al., 2019), such as their trustworthiness and dominance (Todorov et al., 2008). Impressions based on facial appearances are often powerful predictors of a wide variety of social outcomes (Todorov et al., 2015), such as who is likely to win a Congressional seat (see Todorov et al., 2005) or with whom one is likely to invest money (Oosterhof & Todorov, 2008). Criminal justice theories regarding sentencing have argued that appearance-based features influence the way that justice system personnel make decisions (Bridges & Steen, 1998; Steffensmeier et al., 1998). Yet beyond investigating the impact of race (e.g., Bennett & Plaut, 2017; Burch, 2015), only a few empirical studies have investigated the ways that different aspects of physical appearance might shape decision-making in the justice system (see King & Johnson, 2016; Petersen, 2017). Perhaps most importantly, previous research in this area has focused almost exclusively on adults in the justice system (see Johnson & King, 2017; Sutherland et al., 2020). Considering the long-term ramifications of receiving a juvenile record (Feld, 2017; Ulmer & Laskorunsky, 2016), it is critically important to examine whether facial appearance biases are present when youth are just coming to the attention of the juvenile justice system for the first time. The present study addresses these gaps in the literature by investigating the role of facial characteristics in the sanctioning of youth who have been arrested for the first time.

Juvenile Justice System Processing

The juvenile justice system was originally designed to rehabilitate youthful offenders. As a result, there is remarkable variability in how youth are treated by juvenile justice practitioners. As a prime example, juvenile intake officers have substantial discretion in deciding whether an individual case should be handled informally (e.g., receive community service) or be entered into formal sentencing processes (e.g., sanctioned by a judge). As would be expected, legal factors such as the type of crime (violent or non-violent) and the youth's criminal history (first-time offender or repeat offender) certainly do predict processing decisions (Cauffman et al., 2007). However, above and beyond these variables, *extralegal* factors about youth, such as their race (e.g., Caudill et al., 2013) and home environment (Fine et al., 2017), can also influence their fate in the juvenile justice system. Yet, even after accounting for these

documented extralegal factors, there still remains large variability in how youth who have committed a first offense are processed in the juvenile justice system.

The choice of whether to formally or informally process youth can have important implications. Although justice system personnel may select formal processing because they believe the youth may benefit from the resultant increased surveillance and supervision, formal processing may not actually benefit youth. For example, it has been found to *increase* juveniles' likelihood of offending again (Bernburg & Krohn, 2003; Gatti et al., 2009). This is not only ironic because a founding principle of the juvenile justice system is to *reform* the youth, but it is also potentially wasteful if this taxpayer-funded institution actually has a *detrimental* effect on juvenile crime rates (Roman & Butts, 2005). Thus, research identifying the characteristics that lead youth to be formally processed may inform important policy decisions regarding best practices for processing youth in the system fairly and effectively to reduce recidivism. This study sought to illuminate the role of one factor that might bias treatment of youth who have had their first encounter with the law: their faces.

The Power of Facial Characteristics

The face perception literature has consistently demonstrated that people regularly make social judgments based on others' appearances without any other supporting information, such as actual behaviors that would be more diagnostic of their internal states (Langlois et al., 2000). For instance, perceivers are quick to make judgments about an individual's trustworthiness and criminality on the basis of their face alone (Jaeger et al., 2019; Klatt et al., 2016; Smailes et al., 2018). These face-based judgments are problematic because they are largely inaccurate, yet they have direct implications for a variety of outcomes (see Todorov et al., 2015). How a person looks impacts the popularity of their Airbnb listing (Ert et al., 2016), beliefs about their ability to pursue STEM fields (Williams et al., 2019), and even their perceived likelihood of being corruptible (Lin et al., 2018). In sum, others' faces drive our initial impressions of their character, and these impressions carry weight in consequential domains including business, education, and politics. Moreover, these judgments are difficult to correct in light of new information (Todd et al., 2016).

With respect to the criminal justice system, studies indicate that looking less trustworthy makes a person more likely to be selected within a police lineup (Flowe & Humphries, 2011) and to being perceived as guilty when accused of criminal behavior (Ward et al., 2012). Furthermore, adult

offenders are more likely to receive harsh legal sentences when they appear to be less trustworthy, even when the defendant's trustworthiness is not relevant to the case (Eberhardt et al., 2006; Wilson & Rule, 2015).

Although previous studies have documented that facial characteristics are influential in perceptions of adults, there is very little research on the social perception of immature faces. Specifically, there is dearth of research examining whether perceivers infer other traits and characteristics from pre- or peripubescent faces (see Li et al., 2019). Even though facial structures change due to cranial growth during childhood and adolescence (Enlow & Moyers, 1982), the limited research on perceptions of immature faces suggests that some of the findings with adult samples may generalize to youth. For instance, the tendency to perceive Black male faces as threatening extends downwards to young Black boys (aged approximately 5 years; Todd et al., 2016). Thus, extending the limited research on the topic that has focused almost exclusively on adults, our research is the first to investigate whether perceptions of adolescent youths' facial appearance can predict their outcomes in the juvenile justice system.

This study addresses several limitations of the extant research on facial characteristics and sanctioning. First, previous research has overwhelmingly focused on adult offenders. Second, studies in the area have largely relied on data based on photos of college students, photos from online databases, or using imaginary crime scenarios (see Birdsong et al., 2018). Finally, as Johnson and King (2017) note, in the rare instances in which real-world data have been examined, studies have frequently lacked the ability to control for essential case characteristics (e.g., prior offenses). Uniquely, our research uses a sample of first-time offending youth, precluding the potential effect of a prior criminal record on case processing decisions. In addition, these youth were selected for offenses that had substantial probabilities of being either informally or formally processed (i.e., offenses that result in substantial discretion by the justice system, based on a review of historical records over the 5-year period immediately prior to the commencement of the study).

Overview of Present Study

Our study investigates the role of first-time offending youths' facial characteristics in predicting how youth are processed in juvenile justice system. Consistent with past work on adult offenders, we expected that youth with more *facial negativity*, or appearing to possess more negative character traits, would be more likely to receive formal processing (vs. informal processing).

Our research leverages the *Crossroads Study*, a longitudinal investigation that specifically recruited male youth who were apprehended for a first offense of a low-to moderate-level crime (e.g., vandalism, theft; see Cauffman et al., in press). In the recruitment of youth for the study, great care was taken

to select individuals whose crimes were in an ambiguous area where practitioners were afforded the flexibility of deciding whether to process them informally (e.g., receive community supervision) or formally (e.g., formally processed and sentenced through the juvenile court). Moreover, it is important to note that the jurisdiction of the study does not employ standardized processing guidelines for the offenses committed by the study participants (see Fine et al., 2017). Thus, the Crossroads Study affords an ideal opportunity to determine whether youths' facial appearance may have influenced how they were processed. We predicted that youth with more facial negativity would be more likely to receive more severe processing.

Our primary predictor variable of interest was youths' *facial negativity*. We also coded for other facial characteristics that are relevant to perceived criminality. First, because perceived age or maturity has emerged as integral in juvenile case processing decisions and perceptions of juvenile offenders' responsibility (see Scott et al., 2006), we both control for perceived age and test for potential interactions with key study variables. Second, we examined the role of skin tone darkness. There is considerable phenotypic variability within each racial group, and discrimination against people of color is frequently directed at darker skinned members of those groups (i.e., *colorism*; Maddox, 2004). Although colorism biases have primarily been documented among African Americans (e.g., Viglione et al., 2011), there is some evidence indicating that darker skinned Latinx people also experience worse outcomes than lighter skinned Latinx people (White, 2014), though the literature on Latinx youth remains sparse. Consistent with emerging evidence in the adult criminal justice system (King & Johnson, 2016; Monk, 2018), we predicted that darker skin tone would predict harsher treatment above and beyond the impact of youths' racial group membership. Third, due to their previously established importance in face perception (Sutherland et al., 2013), we also assessed observers' perceptions of youths' attractiveness (Eagly et al., 1991) and health (Jones et al., 2001) as control variables.

In summary, our study makes a critical contribution to the literature through utilizing a contemporary, unique, and restricted-access database of youth who have been arrested for the first time to examine whether youths' fate in the juvenile justice system might be predicted by their facial negativity, facial maturity, and skin tone.

Method

Crossroads Youth Sample

To be eligible for the Crossroads Study, youth had to be male, have been arrested for the first time, have been arrested for low-level misdemeanor

offenses (e.g., vandalism 17.5%, theft 16.7%, and possession of marijuana 14.8%), and have been between the ages of 13 to 17. A Privacy Certificate was issued by the Department of Justice to protect participants' privacy by exempting their survey responses from subpoenas, court orders, or other types of involuntary disclosures. Parental and personal consent was obtained to view Crossroads Study participants' juvenile records for research purposes. Photographs were taken by the justice system when the youth first appeared at intake.

In addition to the photos, the records contained the severity of youths' court processing. Formal processing involved being processed and sanctioned through the juvenile court system, and subsequently being placed on probation or referred to a juvenile correctional institution. Youth who are formally processed are required to attend a series of court hearings, and if they are sanctioned with community probation, they are required to check in with both the judge and a probation officer. By comparison, informal processing entailed the diversion of youth from the juvenile justice system that could include a probationary ("wait and see") status or community service. As such, formal processing constitutes a more intensive form of juvenile justice system treatment.

The stimulus set for the current study consisted of 95 Crossroads youth who were photographed by the justice system near the time of their arrest ($M_{\text{age}} = 15.16$ years, $SD = 1.26$). Of these, 82.11% were Latino (33.33% processed informally) and 17% were White (23.53% processed informally). Importantly, there were no racial differences in the severity of the crime committed; Latino and White youth were equally likely to have been charged with a violent offense (e.g., assault) or non-violent offense (e.g., vandalism), $\chi^2(1) = .49, p = .34$. In addition, whether or not the offense was violent (vs. non-violent) did not predict processing formality, $\chi^2(1) = .23, p = .66$. Youth in the photos appeared against a neutral blue background with neutral facial expressions. The photos were cropped in a passport style to show the youth from the upper chest to the head (see Supplemental Figure 1 for mock examples).

Naïve Observers

Crossroads youth had agreed for their records, including intake photographs, to be used for research purposes. Since they did not agree to the release of these photos to members of the general public, we only used research assistants as coders of the youths' facial negativity and other attributes. Thus, we required that observers pass the ethics training and sign a confidentiality agreement not to share any of the photos viewed in the study. We also aimed

to show the youths' photographs to the minimum number of observers necessary to the research goal in order to respect the confidentiality of the Crossroads youth. Hehman et al. (2018) indicates that ratings of the facial characteristics that we were interested in stabilize after 20 to 27 raters. While previous research has used as few as four coders (e.g., Johnson & King, 2017), we aimed for at least 20 observers.

Our sample of observers included 24 undergraduate students rated the photos in exchange for partial credit towards their research experience courses. The observers were blind to the study hypotheses as well as blind to all background information of the Crossroads youth. Nineteen of the observers responded to a demographic survey. Of these, 58.33% were female and the coders were on average 22.64 years old ($SD=3.69$). Further validating our sample size as sufficiently large, our observers' ratings were highly reliable: the absolute agreement ICC(2,24) ranged from .945 to .954 and averaged .949. (Larger samples are needed when ratings are less consistent across individuals.) Consistent with prior research (e.g., Johnson & King, 2017; Wilson & Rule, 2015), we averaged across observers' ratings of each face to yield one score for each juvenile on each dimension that was coded.

Measures and Materials

The *Facial Negativity* composite ($M=4.16$, $SD=0.70$, Range: 2.46–5.51) was created by measuring two dimensions of social judgments from faces, termed dominance and trustworthiness by Todorov et al. (2008). The dominance composite averaged across ratings of the faces as dominant, aggressive, angry, mean, and threatening ($\alpha=.98$). The trustworthiness composite averaged across ratings of faces as trustworthy, caring, happy, likeable, and intelligent ($\alpha=.97$). Previous studies have used a similar approach to assess perceptions of children's faces (Li et al., 2019). All ratings were made on a 7-point Likert scale ranging from 1(*not at all*) to 7(*very much*). The dominance and trustworthiness indices were very strongly correlated, $r(93)=-.82$, $p=.03$, and a factor analysis confirmed that they all loaded onto the same factor (see Supplemental File for details).¹ Indeed, a recent data-driven approach found that these two dimensions are strongly linked to perceptions of a criminal appearance (Funk et al., 2017; c.f., Smailes et al., 2018).

Observers also rated the faces using a Likert scale on skin tone (7-points from *very dark* to *very light*; $M=4.02$, $SD=1.18$, Range: 2.08–6.46) and perceived age (9-points from 9–17 years old; $M=5.91$, $SD=1.20$, Range: 2.42–8.13). Observers rated youth on attractiveness ($M=2.52$, $SD=0.65$, Range: 1.71–4.04) and health ($M=4.28$, $SD=0.73$, Range: 2.35–5.87) on 7-point scales from 1(*not at all*) to 7(*very much*).

Thus, each juvenile had one score for each dimension: facial negativity, skin tone, perceived age, attractiveness, and health. We inspected all of the final variables for outliers. There was one outlier (defined as a Z -score equal to or greater than 3) on attractiveness ($Z=3.45$). Rather than omit the data, we reduced this youth's score to the next highest attractiveness rating ($Z=2.22$; descriptive statistics above are reported after making this adjustment).

Procedure

Observers consented to participate in the study and were told they would be rating faces on various attributes. Ratings were recorded on a computer using Empirisoft's MediaLab. Observers rated each face on a single attribute before moving on to rate them on another attribute. Attributes were arranged in a fixed order to reduce variability due to order effects, and more subjective, value-laden attributes (e.g., aggressive) were placed later so as not to influence the more objective, neutral attribute ratings. The order of attributes was: age, attractiveness, health, skin tone, aggressive, angry, caring, dominant, happy, intelligent, likeable, mean, threatening, and trustworthy. On each screen, observers saw one face and the rating they were to make for that unit (e.g. "How *attractive* is this person?" with a 7-point response scale). Faces were displayed in random order within each attribute unit. Observers completed the ratings alone in a quiet room and at their own pace.

Analytic Strategy

All continuous variables were standardized. We conducted binomial logistic regressions to predict processing type (formal vs. informal) from facial negativity, perceived age, skin tone (dark to light), attractiveness, and race (Latino or White; as self-reported and recorded in their probation files). Our focus was on the predictive power of facial negativity and skin tone in the presence of the control variables. We also investigated all possible interactions of the variables with perceived age. We followed up on significant predictors using ANCOVAs to examine the estimated mean level differences between those who were formally versus informally processed.

See Table 1 for zero-order correlations between the predictor variables. Attractiveness and health were strongly positively correlated; however, we did not collapse these variables into a composite because there was evidence that they were oppositely correlated with processing type (e.g., attractiveness trending positive, health trending negative). Further, including both variables in the same logistic regression skewed estimates of the model (e.g., a 95% CI for the odds ratio for attractiveness from 1.73 to 18.43). We addressed this

Table 1. Zero-Order Correlations Between Predictors of Processing.

	1	2	3	4	5	6
1. Facial negativity	–	–.17 ⁺	–.08	–.56***	–.64***	.43***
2. Race (0 = Latino, 1 = White)		–	.64***	.44***	.36***	.24*
3. Skin tone (dark to light)			–	.36***	.21*	.11
4. Attractiveness				–	.85***	.002
5. Health					–	–.04
6. Perceived age						–

Note. N = 95.

⁺p < .10. *p < .05. **p < .01. ***p < .001.

issue by including attractiveness only in the logistic regression and using both in the general linear model follow-up analyzes. Race and skin tone were also highly correlated predictors, $r(93) = .64, p < .001$. However, these variables were also not combined, as it was essential to our colorism hypothesis to be able to test for skin tone effects above and beyond the influence of race. We inspected the odds ratios and confirmed that race and skin tone’s simultaneous inclusion in the regression did not skew model estimates.

Results

Binominal Logistic Regression Predicting Processing of Youth

We used binomial logistic regression to predict processing type (0 = informal, 1 = formal) from targets’ race (Latino vs. White) and facial ratings of attractiveness, skin tone, maturity, and facial negativity. Our model fit significantly better than the empty model, $\chi^2(6) = 14.07, p = .03$, Nagelkerke $R^2 = .19$ (see Table 2). Perceived age did not interact with any variables except for a marginal interaction with attractiveness, and so the null interactions were dropped from the analysis to conserve degrees of freedom. The model supported our hypothesis that juveniles were more likely to be formally processed if their faces conveyed more negative traits. In other words, juveniles who were perceived as more dominant or less trustworthy to naïve observers received more severe sanctioning.

Skin tone was a significant predictor of processing while already accounting for race in the model. Specifically, when holding other factors constant, with each one unit increase in skin tone darkness, youth’s likelihood of being processed formally (vs. informally) almost doubled. Put differently, a one unit increase in skin tone lightness was associated with roughly half the likelihood of being processed formally (vs. informally) when controlling for

Table 2. Results of Logistic Regression Analysis Predicting Processing Type.

	<i>b</i> (<i>SE</i>)	Odds ratio and 95% CI
Facial negativity	0.97** (.37)	2.64 [1.28, 5.46]
Race (0=Latino, 1=White)	1.89 ⁺⁺ (1.01)	0.15 [0.02, 1.10]
Skin tone (dark to light)	-0.76* (.34)	0.47 [0.24, 0.91]
Attractiveness	0.80* (.37)	2.23 [1.09, 4.56]
Perceived age	-0.36 (.29)	0.70 [0.39, 1.24]
Attractiveness by age	-0.42 ⁺ (.24)	0.66 [0.41, 1.05]

Note. Processing type (0 = informal, 1 = formal).

⁺*p* < .08. ⁺⁺*p* < .06. **p* < .05. ***p* < .01.

other factors. Thus, consistent with prior research on the perception of adult faces, juveniles' skin tone predicted how they were processed above and beyond their race.

Analyzes of Covariance

Next, we report a series of ANCOVAs that follow-up on the logistic regression reported above in order to estimate the mean level differences on the significant predictors (e.g., facial negativity) between formally and informally processed youth. Each ANCOVA is a 2 (Processing type: formal vs. informal) \times 2 (Race: Latino vs. White) between-subjects ANCOVA on one of the predictors (e.g., facial negativity) while controlling for the other predictors (e.g., perceived age, attractiveness, health, and skin tone). This approach also enabled us to include health and attractiveness in the model simultaneously, which we could not do in the logistic regression due to multicollinearity concerns. Whereas the binomial regression examined the simultaneous and unique predictive power of facial characteristics on processing type, the ANCOVAs provide the estimated mean differences between the formally processed and informally processed youth on a single attribute while controlling for all other attributes.

Facial Negativity. An ANCOVA showed a main effect of processing type on facial negativity, $F(1,87)=4.69, p=.03, \eta_p^2=.05$. Consistent with our hypothesis, juveniles who were processed formally ($M_{adj}=4.18, SE=.08$) were perceived to have had more negative facial traits (i.e., high dominance, low trustworthiness) compared to those who were processed informally ($M_{adj}=3.85, SE=.14$) when controlling for differences in attractiveness, skin tone, health, and perceived age.

Attractiveness. There was a significant main effect of processing type on attractiveness, $F(1,87)=12.93, p < .001, \eta_p^2 = .13$. Formally processed juveniles ($M_{\text{adj}}=2.61, SE=.05$) were perceived to be more attractive than informally processed ones ($M_{\text{adj}}=2.26, SE=.09$). There was also a marginal race by processing type interaction, $F(1,87)=3.66, p = .06, \eta_p^2 = .04$. Processing type differences in attractiveness were marginally stronger among White juveniles (formal $M_{\text{adj}}=2.64, SE=.11$ vs. informal $M_{\text{adj}}=2.11, SE=.18$), $p = .004$, than among Latino juveniles (formal $M_{\text{adj}}=2.58, SE=.05$ vs. informal $M_{\text{adj}}=2.41, SE=.06$), $p = .03$.

Health. There was a significant main effect of processing type on facial health, $F(1,87)=6.65, p = .01, \eta_p^2 = .07$. On average, those processed informally were rated significantly healthier ($M_{\text{adj}}=4.55, SE=.11$) than those processed formally ($M_{\text{adj}}=4.25, SE=.06$) when controlling for differences in attractiveness, skin tone, facial negativity, and perceived age.

Skin tone. There was a main effect of race on skin tone, $F(1,87)=44.40, p < .001, \eta_p^2 = .34$, because Latinos ($M_{\text{adj}}=3.76, SE=.11$) had darker skin than Whites ($M_{\text{adj}}=5.78, SE=.28$). More importantly, there was also a main effect of processing type on skin tone, $F(1,87)=5.05, p = .03, \eta_p^2 = .06$, and there was no interaction with race, $p = .39$, suggesting that the effect of processing on skin tone was true for both Latino and White juveniles. Therefore, we obtained evidence of colorism across both racial groups; Latino and White juveniles who were formally processed ($M_{\text{adj}}=4.44, SE=.15$) had darker skin than Latino and White juveniles who were informally processed ($M_{\text{adj}}=5.10, SE=.25$) when controlling for attractiveness, health, facial negativity, and perceived age and accounting for race in the model. In other words, having darker skin appeared to be a risk factor for receiving formal processing for both Latino and White youth.

To rule out the possibility that these results were not due to darker skinned individuals being charged with more serious crimes, we conducted a $2(\text{race: Latino vs. White}) \times 2(\text{crime type: violent vs. non-violent})$ ANOVA on skin tone and found that youth charged with violent crimes ($M=4.25, SD=1.13$) had marginally significantly *lighter* skin than youth charged with non-violent crimes ($M=3.89, SD=1.20$), $p = .05$. Therefore, because lighter skinned individuals were marginally more likely to have committed violent crimes, this suggests that severity of crime cannot account for the role of skin tone on processing decisions.

Discussion

A cornerstone of the adult criminal justice system is the fair application of the law to each resident. By comparison, the juvenile justice system is designed

to be more rehabilitative and more flexible. As a result, juvenile justice system personnel are provided the opportunity to process youthful offenders with individual discretion. The way the juvenile justice system processes and treats youth often has long, deep-rooted impacts on youths' life outcomes. Having a formal juvenile record clearly has a wide variety of long-term ramifications (Feld, 2017; Ulmer & Laskorunsky, 2016). For instance, having a juvenile arrest record impacts the way individuals are treated years later when they are arrested and processed as adults (Greenwood et al., 1984). Indeed, a 20-year study of youth concluded that compared with non-intervention, juvenile justice contact *increases* the likelihood of adult crime seven-fold (Gatti et al., 2009). Furthermore, meta-analytic evidence suggests that formal processing does little, if anything, to reduce recidivism (Petrosino et al., 2010). These alarming findings highlight the need for systematic research to document any extralegal factors that could contribute to youths' processing decisions as an initial step to counteracting potential bias in these decisions.

While previous research indicates that adults' facial characteristics can predict their outcomes in the adult criminal justice system (see Johnson & King, 2017), we have shown that these processes are brought to bear on youth who are coming to the attention of the juvenile justice system for the first time. Altogether, our findings illuminate several potential sources of face-related biases in the processing of first-time offending youth. Despite no pre-existing differences in the severity of their crimes, we found that system-involved youth who simply *appeared* to be more dominant, less trustworthy, had darker skin, and looked less healthy were more likely to receive formal processing, as compared with informal processing. That is, youth who are perceived to be more dominant, less trustworthy, had darker skin, looked less healthy were more likely to be sent through the formal court system for processing, sanctioning, and supervision, as compared with the informal diversionary system. Thus, the present study results support adult justice system researchers' claims that "one's face may determine one's fate, at least in the judicial domain" (Wilson & Rule, 2015, p. 1330). Our study is the first to demonstrate that one's face may determine one's fate even during adolescence.

Our study is also among the first to document colorism in the treatment of Latinos and Whites in the juvenile justice system. We found that, above and beyond race, youth who have darker skin tones are more likely to be processed formally. Our findings comport well with emerging research that skin tone darkness is predictive of youths' outcomes, after accounting for racial group membership and including for White youth (see Thompson & McDonald, 2016). We encourage researchers to continue to investigate the

ways that color-based discrimination may play a role in all youths' experiences with the justice system. We also believe that particular focus on the role of skin tone in Latinx youths' outcomes is critical because Hispanic/Latinx individuals constitute the fastest-growing demographic group in the United States and face more intense criminalization and policing than do White individuals (see Hagan et al., 2005; Sickmund et al., 2015).

Contrary to expectations, our research indicated that facial maturity did not moderate the influence of face perception on social judgment. The ecological approach to social perceptions suggests that facial characteristics may influence impressions when they specifically reveal psychological attributes whose detection is necessary within a particular context (see Berry & McArthur, 1986). Individuals with youthful and submissive-looking facial characteristics cue social approach and elicit help (Keating et al., 2003), and the extent to which one is perceived as being "baby-faced" is correlated with trustworthiness (Li et al., 2019). Within the juvenile justice context, then, it would have been plausible that youth with more childlike facial characteristics would receive more lenient processing. However, this was not found in our study, perhaps due to the fairly limited age range of our sample. Consequently, it will be theoretically important for researchers to investigate when facial maturity moderates the relationships between face perception and social judgment and when it does not. In addition, it will be important for future research to determine whether children's facial characteristics predict other outcomes in the justice system (e.g., receipt of counseling services).

While our study had many strengths, there are limitations that future research should address. First, although our sample size of observers was within the norms for face perception research and its smaller size was necessitated by the extremely sensitive nature of our stimuli, our findings should be interpreted with caution. Additionally, our sample of facial photos of juveniles was limited by the accessibility of these records. Within this sample, we only had a small number of White juveniles. These methodological limitations were dictated by the practical constraints of field research. Additional studies with larger samples of adjudicated juveniles are clearly needed. Second, research is also needed to generalize our results to male offenders of other races and to female juvenile offenders. Third, in addition to revealing facial cues, the photos rated also included minimal body cues consisting of the neck and top of the shoulders. Although past research suggests that people pay the most attention to facial cues, in particular the eyes and mouth regions, when presented with this type of stimuli (Eisenbarth & Alpers, 2011), it is possible that our observers' perceptions of youth were partly based on youths' body cues as well. Perceptions of individuals' bodies can influence their perceived threateningness (Wilson et al., 2017) and perceived

maturity (Johnson & Collins, 1988), and consequently could also play a biasing role in how youth are processed in criminal justice system. Therefore, it will be important for future studies to examine the separate and joint contributions of facial and body characteristics in youths' outcomes.

Additional research is also needed to fully understand the role of attractiveness in predicting juvenile justice outcomes, and specifically why being perceived as attractive was a risk factor, particularly for the youngest offenders. One possible interpretation of our findings is that facial attractiveness tends to be positively correlated with facial masculinity (see Rhodes, 2006). More masculinized faces are perceived to be less honest and more dominant (Perrett et al., 1998), and emerging laboratory research with adults suggests that participants associate masculinity with committing violent crime (Estrada-Reynolds et al., 2017). It is possible that attractiveness was merely a proxy for masculinity, thus it would be entirely plausible that youth who appeared to be more masculine were more likely to be processed formally. Future research is necessary to test this possibility.

Practical Implications

Our findings suggest that some youth may not experience the juvenile justice system in a fair way on the basis of their appearance. We have a few suggestions for practitioners hoping to avoid making biased decisions about juvenile offenders. First, it must be recognized that individuals rapidly form impressions of individuals based on their faces, and these impressions can elicit self-fulfilling prophecies in a subsequent interaction (Gunaydin et al., 2017). To eliminate these potential biases, we encourage practitioners to "blind" the case files so that they first learn the details of the case before seeing any identifying information about the offender, including his name, race, and other appearance-related factors. By forming an impression of the relevant case details before learning youths' appearance, practitioners may reduce the impact of youths' appearance on their interpersonal interactions and subsequent judgments.

In addition, people can effectively reduce their subconscious biases when they are made aware of these biases and are motivated to intentionally work to reduce them (Devine et al., 2012). Practitioners should be made aware of the potential biasing effects of facial appearance and trained on strategies for reducing them. Specifically, we recommend that practitioners try to fully understand the characteristics of the individual's case and avoid filling in details based on their assumptions or past experiences with other youth. Furthermore, decisions made under high stress or time pressure are more likely to be biased. Practitioners should be able to make processing decisions

with adequate time and energy. We recommend that policy makers try to reduce caseloads of and administrative burdens on practitioners and that practitioners use evidence-based factors and assessments when making the critical decision of how to process youth in the juvenile justice system.

Conclusion

Johnson and King (2017) wrote that, “If justice is blind, then physical appearance should be of no consequence, yet our results demonstrate that ‘facial profiling’ occurs in the criminal courts” (p. 541). Unfortunately, our results indicate that such profiling may begin even earlier. Practitioners in the juvenile justice system were given flexibility in order to enable them to better account for mitigating factors in offenders’ circumstances. Yet, with this greater flexibility comes even more room for social biases to play into the ways that youth are processed. Indeed, the current study demonstrates that, in a sample of actual offenders, youth who commit offenses of moderate severity are more likely to receive harsher punishment depending on how they look. If the intention of the juvenile justice system is to rehabilitate youth, including deterring them from reentering the system, then better, more structured approaches for approaching processing decision-making need be developed and implemented that take the youth’s appearance out of the picture.

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Acknowledgments

We are grateful to the many individuals responsible for the data collection and preparation of The Crossroads Study.

Declaration of Conflicting Interests


The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The Crossroads Study is supported by funding from the John D. and Catherine T. MacArthur Foundation (#16-109232-000-JJJ; # 15-108383-000-USP), the William T. Grant Foundation (#1897962), Temple University (#270076/270117-UCI), and the County of Orange (#MA-057-160-10448) awarded to E.C. and/or P.F.

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Supplemental Material

Supplemental material for this article is available online.

Note

1. Previous research has suggested that there may be two dimensions comprising the impression formation space: trustworthy, friendly, or warm on one dimension, and traits such dominance, competence, or physical strength on the other. However, this work was based on data on ratings of adult, White, male, bald, and computer-generated photos (Oosterhof & Todorov, 2008) and recent evidence challenges the universality of these models (Hehman et al., 2019). As a result, we used a data-driven approach to derive our one-factor solution.

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