

# Phenotypic Bias and Ethnic Identity in Filipino Americans\*

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*Objective.* Links between phenotypes (skin tone, physical features) and a range of outcomes (income, physical health, psychological distress) were examined. Ethnic identity was examined as a protective moderator of phenotypic bias. *Method.* Data were from a community sample of 2,092 Filipino adults in San Francisco and Honolulu. *Results.* After controlling for age, nativity, marital status, and education, darker skin was associated with lower income and lower physical health for females and males. For females, more ethnic features were associated with lower income. For males, darker skin was related to *lower* psychological distress. One interaction was found such that females with more ethnic features exhibited *lower* distress; however, ethnic identity moderated distress levels of those with less ethnic features. *Conclusions.* Phenotypic bias appears prevalent in Filipino Americans though specific effects vary by gender and skin color versus physical features. Discussion centers on the social importance of appearance and potential strengths gained from ethnic identification.

*In school I always felt like an alien compared to the other girls with their curly blond hair, light eyes, and pointed noses. I didn't look anything like them. I had dark, slanted eyes, straight black hair, and a flat nose . . . When I left elementary school, I became fed up with constantly being the social outcast. I decided, at that point, that . . . culture was a very important part of my life.*

As poignantly illustrated in the anecdote above (Nam, 2001:76–79), empirical research, personal accounts, and fictional works that ring true to life (e.g., *The Bluest Eye*, by Toni Morrison) support a widespread preference for light skin and Eurocentric features. Evident across diverse ethnic groups, appearance-related biases have persistent and often damaging effects on development and mental health. In fact, racism and discrimination, at their core, may stem from such “phenotypicity bias” (Maddox, 2004). Given

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these negative consequences, one pressing issue concerns the identification of social and psychological factors that may serve as protective moderators. In particular, ethnic identity has been implicated as a positive resource and buffer against discrimination and other stressful experiences (e.g., Kiang et al., 2006; Mossakowski, 2003), but has not been examined in light of phenotypic bias. Hence, we examined direct and interactive effects of phenotypes and ethnic identity on three broad outcomes, namely, income, physical health, and psychological distress.

### **Phenotypic Characteristics: Skin Tone and Physical Features**

Phenotypes have long been a marker for discrimination in the United States. Biases date back to slavery when those with lighter skin led more “privileged” lives by performing household chores, compared to those with darker skin who worked long hours in the field (Thompson and Keith, 2001). To this day, light skin tone is associated with privilege. Keith and Herring (1991) found that, after controlling for parents’ socioeconomic status, significant differences in income, education, and occupation status were found in individuals from African-American backgrounds, with better outcomes favoring those with lighter skin. Other detrimental effects also have been found such that darker skin tone has been associated with higher blood pressure in African Americans (Klag et al., 1991; Tyroler and James, 1978), as well as with psychological factors, such as lower perceived attractiveness, self-esteem, and self-efficacy (Chambers et al., 1995; Thompson and Keith, 2001).

Negative effects of phenotypic bias also have been found in those from Latin American backgrounds. For instance, Telles and Murguia (1990) found darker skin tone and more native indigenous features in Mexican Americans to be negatively associated with income, even after controlling for personal endowments such as age and work experience. Moreover, in another study using a Mexican-American sample, those with dark skin exhibited not only lower academic and job success, but also higher depression compared to those with light skin (Codina and Montalvo, 1994). Notably, recent work has shown that negative phenotypic effects are not always consistent. For instance, Espino and Franz (2002) found that darker skin had a negative effect on income for Cuban Americans, but not for Puerto Ricans, supporting the need to examine phenotypes in more diverse samples.

To be sure, further research is needed for several reasons. First, existing studies have largely focused on the experiences of African Americans and, only more recently, on those from Latin-American backgrounds. In addition to examining phenotypic bias among ethnic groups that have been traditionally understudied in prior work, it is important to untangle whether skin tone, physical features, or both are relevant in terms of outcomes. Existing work has often focused on skin color because of its visible and permanent

quality (Thompson and Keith, 2001); however, in some ethnic groups (e.g., Asian or Latin American), physical features may be equally or even more salient than skin color. For instance, given the increased popularity of using cosmetic surgery to alter physical features toward a Western ideal (e.g., common in Asians in blepharoplasty, in which an eyelid crease is stitched to create bigger, rounder eyes), it seems particularly important to consider the simultaneous impact of both skin color and other physical features. Furthermore, it is crucial to consider factors that can potentially attenuate the widespread prevalence and negative impact of phenotypic bias.

### **Phenotypic Characteristics in Filipino Americans**

Filipino Americans represent an especially informative group from which to build our understanding of phenotypic bias given their ethnically diverse roots and colonial history. Traditionally, settlers from Indonesia, China, Malaysia, Borneo, India, Java, and Spain all have been drawn to the Philippine Islands. Due to such a multifaceted heritage, Filipino Americans reflect a population that can be distinguished by diverse complexions and physical features that range from depicting their European history to reflecting more of an indigenous Spanish or Asian heritage (Rita, 1996). As such, appearance-related stereotypes and evaluations facing these individuals may center on either or both skin color and physical features.

Despite the range of phenotypic characteristics available to the Filipino culture, the virtues of Western European values and standards of appearance were emphasized early in the country's history. The Philippines were first colonized in 1521, under the influence of Spain (Rafael, 2000). At the start of the 19th century, Spain sold the Philippines to the United States, thus beginning a long period of U.S. colonization. Under both regimes, Filipinos were inculcated with the belief that Western ideals are superior to those of the native culture (Bergano and Bergano-Kinney, 1997; Rafael, 2000). A recent review of Filipino colonial history points to the prevalence of "colonial mentality" or the idea that, through their history, Filipinos have been socialized to uniformly value Western ideals and physical characteristics (e.g., given the popularity of products that "whiten" skin) (David and Okazaki, 2006). Indeed, like those from African and Latin-American backgrounds, colorism and societal preferences for lighter skin and more Eurocentric features are commonly found in Asian cultures as well (Rondilla and Spickard, 2007). Such values may be particularly salient for Filipinos given their history of colonization.

Darker skin tone and more ethnic features were thus expected to predict lower income and more physical and mental health concerns in Filipino Americans. Such biases could stem not only from the common belief that "white is right" (Bergano and Bergano-Kinney, 1997), but also from the extent to which individuals are perceived as different from the mainstream.

In line with acculturation perspectives, whether or not the larger society perceives targeted individuals to be “different” may predict negative experiences and xenophobia, which, in turn, could lead to damaging outcomes and alienation (Goto, Gee, and Takeuchi, 2002). The negative effect of phenotypes may thus stem from both an internalized sense of oppression or colonial mentality, whereby individuals feel that they fall short of society’s standards, as well as from negative experiences with others who are members of the mainstream culture.

On the other hand, it also is possible that individuals with *light* skin or *less* ethnic traits experience negative outcomes since these individuals may be dubiously perceived or even ostracized by their dark-skinned peers until they have “proven” themselves as legitimate members of their ethnic group (Montalvo, 2004). Moreover, outward consistency with one’s ethnicity (e.g., dark skin, ethnic features) could lead to greater coherence in terms of one’s sense of self, which has been shown to have positive associations with adjustment (Harter, 1999). Hence, a plausible competing hypothesis is that having more ethnic characteristics that are in line with one’s actual ethnic background may have potentially positive effects.

### **The Moderating Role of Ethnic Identity**

Once established, ethnic identity has a wide-reaching impact on development, with consistent links to positive adjustment outcomes such as well-being and self-esteem (Tsai, Ying, and Lee, 2001; Umaña-Taylor, 2004). Indirect or protective links also have been found, with ethnic identity moderating the negative effect of perceived discrimination on well-being and distress (Mossakowski, 2003; Sellers and Shelton, 2003). Drawing on social identity theory (Tajfel, 1981), protective effects can be attributed to a sense of group belonging, which provides a perception of social support or connectedness that shields individuals from negative experiences or stress (Kiang et al., 2006). In fact, a major function of ethnic identity may be to protect individuals from adverse events (Cross, Parham, and Helms, 1998; Tajfel and Forgas, 2000).

Given its function as a positive resource in individuals’ lives, perhaps phenotypic liabilities may be buffered by strong levels of ethnic identity. For instance, individuals who are distressed by their darker and more foreign features may be able to draw on their ethnic identity and belonging to cope with the stressors that such features may bring. Alternatively, those with less ethnic features who may be feeling somewhat like ethnic impostors may be able to compensate through their psychological and emotional identification with their ethnic group. In both cases, links between physical appearance and ethnic identity appear intricately linked (Root, 1998), and suggest that deficits in one may be offset by strengths in another. Preliminary research on Puerto Rican women has indeed found that darker phenotypes are not

unequivocally related to poorer functioning, and that cultural variables such as ethnic identity and language proficiency can moderate phenotypic stress (López and Neal-Barnett, 2004).

### **Phenotypes and Gender**

The impact of meeting social standards of beauty has been found to vary by gender (Harter, 1999). For instance, a woman is often subjected to a singular focus on appearance; however, the attractiveness of a man is often judged through multiple arenas of success, for instance, wealth, power, or occupational status. Skin-tone biases do tend to be gendered within ethnic groups, suggesting that phenotypic effects are more profound for women than for men (Codina and Montalvo, 1994; Thompson and Keith, 2001). For instance, issues of skin color and attractiveness are particularly salient to women from African-American backgrounds (Boyd Franklin, 1991; Neal and Wilson, 1989), and race, gender, and colorism tend to interact in forming a triple threat that adversely affects self-esteem among dark-skinned African-American women (Thompson and Keith, 2001). Similar gendered effects have been found in Mexican women (Hunter, 2005), though few, if any, research has focused on women from Filipino backgrounds.

### **The Current Study**

The goal of the current study was to examine associations between phenotypic characteristics, ethnic identity, and three disparate outcomes in a community sample of Filipino-American adults. After controlling for demographic variables such as age, nativity, marital status, and education, we examined whether skin tone and physical features are related to individuals' income, self-reported physical health, and psychological distress. By incorporating social, physical, and psychological outcomes, we extended existing literature, which has tended to focus on only one consequence at a time (e.g., income). We also built on existing work by examining interactive effects of a potentially protective resource, namely, ethnic identity. In consideration of gender, we stratified analyses across females and males.

### **Methods**

#### ***Participants***

Data from 2,092 Filipino Americans (individuals from Filipino backgrounds who reside in the United States) are from the Filipino American Community Epidemiological Study (FACES), conducted in 1998–1999 in San Francisco, California and Honolulu, Hawaii. These two cities hold the largest representation of Filipino Americans in the United States. For in-

stance, almost 75 percent of all Filipino Americans are estimated to live in California and Hawaii (Agbayani-Siewert and Revilla, 1995). A three-stage probability sampling procedure was utilized to ensure adequate representation of the Filipino-American population in the areas sampled. First, Census tracts were selected and cross-stratified by three variables: (1) percent of Filipino-American households, (2) median income for Asian-Pacific households, and (3) percent of race-ethnicity composition. Within each tract, blocks were randomly selected. Households were then randomly selected within each block. In each household, all adults over age 18 who identified as Filipino American were eligible to participate. A Kish (1965) procedure was used to randomly select one respondent from each household to be interviewed for the study. Although sampling probabilities varied within each step, ultimate selection probabilities were designed to be similar across all households. Participants' overall response rate was 78 percent. As recommended for survey data (Korn and Graubard, 1995), sample weights were applied in multivariate analyses to control for geographical location and differential probabilities of geographical sampling and selection.

The mean age of the sample was 42 years ( $SD = 13.33$ ). Twenty-two percent were U.S. born ( $N = 458$ ). Approximately 65 percent were married, 8 percent were separated or divorced, 4.7 percent were widowed, and 22 percent had never been married. Education levels were generally diverse, with 30 percent having experienced some high school or less, 20 percent graduated with a high school degree or equivalent (e.g., GED, vocational training), 24 percent experienced some college, 23 percent had a college degree, and 3 percent obtained advanced graduate or professional training. Sample weights were applied in order to account for gender biases in participation (Korn and Graubard, 1995). After weighting by gender, females represented approximately 49 percent of the sample.

### ***Procedure***

Given the epidemiological nature of the study, a large battery of measures was administered to each participant. Interviews were conducted in participants' homes by trained bilingual interviewers fluent in both English and Tagalog or Ilocano, and lasted approximately 90 minutes. Interviewers were from Filipino backgrounds, and varied in their own phenotypic characteristics. Assessments were conducted in each participant's language of preference.

### ***Measures***

*Skin Tone.* Skin tone was assessed by both self and observer report. Participants were asked to rate their skin color on a five-point scale ranging from "very fair" to "very dark." Interviewers also rated participants' skin

color on a five-point scale ranging from “very light” to “very dark.” These reports were significantly correlated ( $r = 0.57$ ,  $p < 0.001$ ), and thus combined to create a single index of skin tone with higher numbers reflecting darker skin.<sup>1</sup> The internal consistency of this two-item aggregate was good ( $\alpha = 0.73$ ).

*Physical Characteristics.* Self and observer reports assessed participants’ physical characteristics. Participants described their physical characteristics on a six-point scale ranging from “very European” to “very Filipino.” They also made similar ratings on a second item, with responses ranging from “very non-Filipino” to “very Filipino.” Interviewers also rated participants’ physical characteristics using these two items. Self and observer reports were significantly correlated ( $r = 0.64$ ,  $p < 0.001$ ), and combined to create a single index of physical features. Higher numbers reflect more Filipino characteristics. The internal consistency of this four-item assessment was good ( $\alpha = 0.89$ ).

*Ethnic Identity.* The Multigroup Ethnic Identity Measure (MEIM) (Phinney, 1992) was used to assess ethnic identity. The Affirmation and Belonging subscale, consisting of five items, reflects ethnic pride and feelings of belonging and attachment to one’s group. Sample items include: “I am happy that I am Filipino,” “I have a strong sense of belonging to the Filipino community,” and “I have a lot of pride in Filipinos and their accomplishments.” The Ethnic Identity Achievement subscale assesses exploration of and commitment to one’s ethnic group. Although the original subscale consists of seven items, previous factor analyses utilizing these FACES data have found that four of the seven items exhibit weak loadings (see Gong et al., 2003). Hence, only three items from this subscale were included in our overall index of ethnic identity (e.g., “I have a clear sense of my Filipino background and what it means to me,” “I understand what being Filipino means to me, in terms of how I relate to Filipinos and other ethnic groups,” and “In order to learn more about my Filipino background, I have often talked to other people about my Filipino culture and history”). One item from the Ethnic Behaviors subscale, “I participate in Filipino cultural practices, such as special food, music, or customs,” also was included based on prior work. All items were scored on a four-point scale ranging from “strongly disagree” to “strongly agree,” with higher scores

<sup>1</sup>Notably, for both skin tone and physical characteristics, we ran preliminary analyses to examine main effects and interactions between self and observer reports. Patterns were similar for both types of reports and no interactions were significant, further justifying our parsimoniously combined index.

reflecting higher levels of ethnic identity. The internal consistency of the nine-item index was good ( $\alpha = 0.79$ ).

*Income.* Participants were given a list of seven income categories and asked to rate their annual personal income. Higher numbers reflect higher income such that 1 = less than \$25,000, 2 = \$25,000 to \$49,999, 3 = \$50,000 to \$99,999, 4 = \$100,000 to \$199,999, 5 = \$200,000 to \$299,999, 6 = \$300,000 to \$499,999, and 7 = \$500,000 or more. Responses from those who did not know their income or chose not to answer were coded as missing (8 percent).

*Physical Health.* Self-reported ratings of physical health were derived from two items used successfully in prior research (Erosheva, Walton, and Takeuchi, 2007; Ferraro and Yu, 1995; Idler and Benyamini, 1997). The first item was rated on a five-point scale ranging from “excellent” to “poor” and reads: “How would you rate your overall physical health?” The second item was rated on a three-point scale and reads: “Would you say your overall health is better, about the same, or worse than other people your age?” These two items were standardized then aggregated to reflect an overall index of physical health. Higher numbers represent better physical health.

*Psychological Distress.* The Depressive Symptom scale from the Symptom Checklist-90 Revised (Derogatis, 1994) measured psychological distress. Symptoms were assessed in light of the past 30 days and represent a range of symptomatology, including feeling trapped or caught, worthless, lonely, low in energy, hopeless about the future, that everything is an effort, decreased interest in life or living, excessive worrying, self-blame, crying, and thoughts of suicide. As described in prior work (Gong et al., 2003), one item assessing loss of sexual interest or pleasure was omitted, which resulted in a 20-item scale. Items were scored on a five-point scale ranging from “not at all” to “extremely.” Higher values reflect higher levels of psychological distress. This scale has been tested for validity in individuals from Filipino backgrounds (Takeuchi et al., 1989), and the internal consistency obtained in this sample was good ( $\alpha = 0.93$ ).

## **Results**

### ***Bivariate Associations and Means***

Bivariate correlations and means of key study variables are shown in Table 1. As expected, darker skin tone and more Filipino characteristics were



TABLE 1  
Bivariate Correlations and Means of Study Variables

	(1)	(2)	(3)	(4)	(5)	(6)	Means (SDs)		t Tests
							Females	Males	
(1) Skin color	—	0.31***	0.05	-0.10***	-0.15***	-0.12***	2.73 (0.51)	2.93 (0.53)	8.62***
(2) Physical characteristics	0.32***	—	0.15***	-0.08**	-0.05*	-0.08**	5.02 (0.66)	5.06 (0.68)	1.32
(3) Ethnic identity	0.03	0.18***	—	-0.07*	0.00	-0.15***	3.57 (0.48)	3.55 (0.47)	0.76
(4) Income	-0.20***	-0.13***	0.01	—	0.24***	0.05	1.54 (0.71)	1.69 (0.82)	4.37***
(5) Physical health	-0.12***	-0.05	0.07*	0.18***	—	-0.08*	0.00 (0.84)	0.01 (0.85)	0.99
(6) Psychological distress	-0.08**	-0.13***	-0.13***	0.06*	-0.14***	—	1.38 (0.50)	1.25 (0.42)	6.14***

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

NOTE: Females ( $N = 1,021$ ) reflected along bottom half of diagonal, males ( $N = 1071$ ) reflected along top of diagonal.

related to lower income and poorer physical health. Interestingly, more ethnic features were related to better mental health or lower psychological distress. Skin tone and ethnic identity were not related for either males or females, but having more Filipino features was significantly associated with higher ethnic identity. Ethnic identity was correlated with better physical and mental health for females, and with lower income and better mental health for males. In terms of associations among outcomes, for both females and males, higher income was related to better physical health, which was, in turn, related to better mental health. In addition, for females only, higher income was associated with higher psychological distress.

Mean values, also shown in Table 1, indicate that participants' skin color averaged around the midpoint ("medium") of the scale, and that males were rated as significantly darker than females ( $t = 8.62$ ,  $p < 0.001$ ). Physical features did not vary by gender and averaged around the "Filipino" end of the scale. Both genders reported a strong sense of ethnic identity, averaging at the upper end of the scale. To provide additional detail on the average income rating shown in Table 1, most individuals reported a yearly income of around \$25,000 or less (54 percent). Approximately 33 percent reported an annual income between \$25,000–50,000, 11 percent reported between \$50,000–100,000, and about 2 percent reported earning over \$100,000. Females reported significantly lower income than males ( $t = 4.37$ ,  $p < 0.001$ ). No gender differences were found with regard to physical health. Given that these data were from a large community sample representative of the normal population, average levels of distress were relatively low, and females were significantly more distressed than males ( $t = 6.14$ ,  $p < 0.001$ ).

### ***Multivariate Associations Among Phenotypes, Ethnic Identity, and Outcomes***

To further examine our primary research questions pertaining to main and interactive effects of phenotypes and ethnic identity on adjustment, we conducted a series of multiple regressions. In separate models, each outcome (income, physical health, psychological distress) was regressed on phenotypic features (skin tone, physical characteristics), ethnic identity, and phenotypes interacted with ethnic identity. We expected that darker skin and more ethnic features would be negatively associated with outcomes, and that ethnic identity would serve as a moderator of any negative phenotypic effects. For each model, we first entered a series of demographic controls (Step 1). Main effects of skin tone, physical characteristics, and ethnic identity were entered at Step 2. Simultaneously entering skin tone and physical characteristics allowed us to determine whether one variable accounted for variance in outcomes above and beyond the other variable, thereby isolating each

effect.<sup>2</sup> Two interaction terms were entered at Step 3 (skin tone \* ethnic identity, physical features \* ethnic identity).

To examine gendered effects of phenotypes, we stratified analyses by gender and ran identical models separately for females and males. Although each step of the models is shown in Table 2, description of results focuses on coefficients relevant to primary research questions (i.e., three main effects and two interaction terms derived from the third and final step of each model).

*Income.* As shown in Table 2, there were main effects on annual income such that females with darker skin and more Filipino features reported lower income than those with lighter skin and Eurocentric features ( $\beta = -0.12$ ,  $p < 0.001$  and  $\beta = -0.10$ ,  $p < 0.01$ , respectively). Notably, these negative effects were significant even after controlling for demographic variables such as age and education. For males, darker skin tone had a negative effect on income ( $\beta = -0.06$ ,  $p < 0.05$ ). Ethnic identity exerted a significant main effect such that males with higher ethnic identity reported lower annual income ( $\beta = -0.08$ ,  $p < 0.01$ ). For both genders, no interactions between phenotypes and ethnic identity were found.

*Physical Health.* Even after controlling for demographic traits, darker skin tone was related to lower physical health in females ( $\beta = -0.10$ ,  $p < 0.01$ ) and in males ( $\beta = -0.13$ ,  $p < 0.001$ ). In addition, for females, ethnic identity had a positive effect on physical health ( $\beta = 0.07$ ,  $p < 0.05$ ). No interactions were found for either females or males.

*Psychological Distress.* Although no main effects on psychological distress were significant for females, the interaction between physical features and ethnic identity was significant ( $\beta = 0.07$ ,  $p < 0.05$ ). As depicted in Figure 1, females with *less* Filipino features appeared to have significant liabilities in their mental health, but only if they also exhibited low levels of ethnic identity. In other words, a strong ethnic identity provided some protection against the negative effect of having Eurocentric physical features. Simple slope regressions revealed that the relation between physical features and psychological distress was negative and significant among females with lowest levels of ethnic identity (slope =  $-0.06$ ), and negative but not significantly different from zero for those with moderate levels of ethnic identity (slope =  $-0.02$ ). For those with high levels of ethnic identity, the association

<sup>2</sup>In preliminary analyses, we also examined the interactive effects of skin tone and physical features. None of these interactions were significant; hence, we focus on the main effects of phenotypes in these analyses.

TABLE 2  
Regression with Phenotypes and Identity Predicting Outcomes

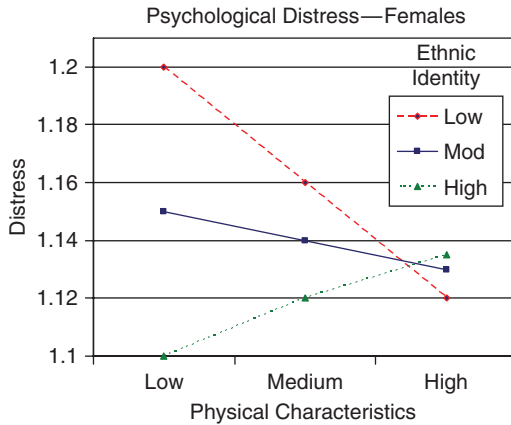
	Females			Males		
	Income <i>b</i> SE $\beta$	Health <i>b</i> SE $\beta$	Distress <i>b</i> SE $\beta$	Income <i>b</i> SE $\beta$	Health <i>b</i> SE $\beta$	Distress <i>b</i> SE $\beta$
Step 1 Age	0.00 .00	-0.01 0.00	0.00 0.00	0.00 0.00	-0.01 0.00	0.00 0.00
U.S. born	0.03 0.06	-0.08 0.07	0.12 0.04	.04 0.06	.02 .07	0.05 0.03
Married (1 = yes)	-0.06 0.01	-0.02 0.02	0.03 0.01	-0.09 0.02	-0.04 0.02	0.01 0.01
Education	0.05 0.00	0.02 0.01	0.02 0.00	0.05 0.01	0.03 0.01	0.01 0.00
Step 2 Age	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
U.S. born	-0.01 0.06	-0.06 0.07	0.09 0.04	0.02 0.06	0.05 0.08	0.06 0.03
Married	-0.06 0.01	-0.01 0.02	0.03 0.01	-0.10 0.02	-0.04 0.02	0.01 0.01
Education	0.04 0.00	0.02 0.01	0.02 0.00	0.04 0.01	0.22 0.01	0.01 0.00
Skin color	-0.17 0.05	-0.17 0.05	-0.02 0.03	-0.10 0.05	-0.22 0.06	-0.09 0.03
Phy. features	-0.11 0.04	-0.01 0.04	-0.03 0.02	-0.05 0.04	0.02 0.05	0.02 0.02
Eth. identity	-0.04 0.04	0.14 0.05	-0.07 0.03	-0.12 0.05	0.03 0.06	-0.11 0.03
Step 3 Age	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.00 0.00
U.S. born	-0.01 0.06	-0.05 0.07	0.09 0.04	0.02 0.06	0.06 0.07	0.06 0.03
Married	-0.06 0.01	-0.01 0.02	0.03 0.01	-0.10 0.02	-0.04 0.02	0.01 0.01
Education	0.04 0.00	0.02 0.01	0.02 0.00	0.04 0.01	0.24 0.01	0.01 0.00
Skin color	-0.17 0.05	-0.17 0.05	-0.02 0.03	-0.10 0.05	-0.22 0.06	-0.09 0.03
Phy. features	-0.11 0.04	-0.01 0.04	-0.03 0.02	-0.05 0.04	0.02 0.05	0.02 0.02
Eth. identity	-0.04 0.04	0.14 0.05	-0.07 0.03	-0.12 0.05	0.03 0.06	-0.11 0.03
Step 3 Age	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.00 0.00
U.S. born	-0.01 0.06	-0.05 0.07	0.09 0.04	0.02 0.06	0.06 0.07	0.06 0.03
Married	-0.06 0.01	-0.01 0.02	0.03 0.01	-0.10 0.02	-0.04 0.02	0.01 0.01
Education	0.04 0.00	0.02 0.01	0.02 0.00	0.04 0.01	0.24 0.01	0.01 0.00
Skin color	-0.17 0.05	-0.16 0.05	-0.02 0.03	-0.10 0.05	-0.21 0.05	-0.09 0.03
Phy. features	-0.11 0.04	-0.01 0.04	-0.02 0.02	-0.05 0.04	0.02 0.04	0.02 0.02
Eth. identity	0.05 0.05	0.12 0.06	-0.04 0.03	-0.15 0.06	0.07 0.06	-0.10 0.03
Skin * Eth	0.01 0.09	-0.01 0.10	0.08 0.06	0.12 0.10	-0.15 0.10	-0.03 0.05
Features * Eth	0.02 0.07	-0.10 0.08	0.09 0.04	-0.08 0.07	0.08 0.07	0.03 0.03

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

NOTE: The following  $R^2$ 's and change in  $R^2$ 's were found for each model: Females, Income:  $R^2 = 0.13$  for Step 1;  $\Delta R^2 = 0.03$  for Step 2 ( $p < 0.001$ );  $\Delta R^2 = 0.00$  for Step 3 (ns); Females, Health:  $R^2 = 0.03$  for Step 1;  $\Delta R^2 = 0.02$  for Step 2 ( $p < 0.001$ );  $\Delta R^2 = 0.00$  for Step 3 (ns); Females, Distress:  $R^2 = 0.07$  for Step 1;  $\Delta R^2 = 0.01$  for Step 2 ( $p < 0.05$ );  $\Delta R^2 = 0.01$  for Step 3 ( $p < 0.01$ ); Males, Income:  $R^2 = 0.12$  for Step 1;  $\Delta R^2 = 0.01$  for Step 2 ( $p < 0.01$ );  $\Delta R^2 = 0.00$  for Step 3 (ns); Males, Health:  $R^2 = 0.03$  for Step 1;  $\Delta R^2 = 0.02$  for Step 2 ( $p < 0.01$ );  $\Delta R^2 = 0.00$  for Step 3 (ns); Males, Distress:  $R^2 = 0.03$  for Step 1;  $\Delta R^2 = 0.02$  for Step 2 ( $p < 0.001$ );  $\Delta R^2 = 0.00$  for Step 3 (ns).

FIGURE 1

Females' Psychological Distress by Physical Characteristics and Ethnic Identity



between features and distress was in the positive direction (slope = 0.02), but not significantly different from zero.

For males, a main effect of skin tone was found such that darker skin was associated with *less* psychological distress ( $\beta = -0.11$ ,  $p < 0.001$ ). A main effect of ethnic identity also was found such that higher ethnic identity was related to less psychological distress ( $\beta = -0.11$ ,  $p < 0.001$ ); however, no interactive effects were found.

## Discussion

Judgments based on phenotypes or how we look are virtually unavoidable in our society. Although extensive research on individuals from African and Latin-American backgrounds points to detrimental effects of dark skin and ethnic features (Codina and Montalvo, 1994; Thompson and Keith, 2001), associations may not be as consistent or straightforward in other ethnic groups. What is more, the examination of gender differences and the identification of variables that potentially protect against negative phenotypic effects are needed in order to build on existing work. We addressed these issues by examining phenotypic bias in Filipino Americans, an understudied ethnic group in this research area. In doing so, we shed light on the importance of skin color versus physical features, gender, and the protective role of ethnic identity.

Three outcomes were examined in order to gain a comprehensive glimpse into how phenotypes affect the lives of Filipino-American adults. Consistent with prior work on other ethnic minority groups, phenotypes had similar

liabilities in Filipino Americans in terms of income and physical health. However, specific effects varied by skin tone versus physical features and by gender. For instance, although darker skin was associated with lower income and lower physical health for both females and males, the negative association between physical features and income was significant only for females. Interestingly, in light of psychological distress, more ethnic phenotypes appeared to be linked with *less* distress.

One explanation for this unexpected finding could be due to the psychological effects of incongruence between one's physical appearance and ethnic ancestry. Indeed, physical appearance plays a key role in how we understand ourselves as part of a larger ethnic group (Aboud, 1987). The degree to which one looks ethnic or how others define one could provide validation for who one is and for what social group one should identify with. A lack of congruence between one's internal and external ethnic belonging could result in psychological tension or confusion over one's true self, which prior work has shown to be an important feature in development (Harter, 1999). Such congruence appears important in terms of one's own psychological or internal distress, but not in terms of outcomes such as income and physical health, which may be more embedded and dependent on others' views (e.g., a boss who determines income) and on society itself.

Notably, all the main effects of phenotypes found were significant even after controlling for key background variables such as age, nativity, marital status, and education. Taken together, skin tone was associated with all three outcomes for males. For females, skin tone was directly associated with income and physical health, and physical features were associated with income. Given that phenotypic effects can be partially attributed to society's emphasis on physical appearance and attractiveness in our conceptualizations of the self, one explanation for these differential findings is that society's criteria for physical attractiveness are often more stringent for females compared to males (Harter, 1999). Hence, although skin color was important for both genders, females appeared to be subject to an additional evaluation of their appearance, namely, their physical features. Gender differences also were reflected by the interaction between physical characteristics and ethnic identity in predicting females' psychological distress, a notable finding to which we turn to next.

Recent research has emphasized the positive benefits of having a strong sense of ethnic identity, particularly in light of stress and discrimination (e.g., Kiang et al., 2006; Mossakowski, 2003). From a social identity perspective (Tajfel, 1981), the strength or social support that can arise out of one's ethnic identity could then serve as a positive resource in individuals' lives and shield against negative experiences. Our results support this perspective. That is, a strong sense of ethnic identity was found to moderate the link between physical features and distress, at least for females. Several explanations can be put forth to help explain these results. First, social integration has a wide range of benefits in terms of health and development

(Seeman, 1996). Such social connectedness may be particularly important for females since relational and social networks tend to be more salient for women than for men (Harter, 1999). In terms of phenotypic differences among women themselves, it is possible that those with lighter skin and less ethnic features are viewed dubiously by their peers (Montalvo, 2004) and, as a result, these women experience within-group discrimination or other negative experiences that lead to distress. For these women who exhibit more Eurocentric features, it may be particularly important to have a strong sense of psychological affiliation with their ethnic group to counteract phenotypic effects, since they lack the physical validation of being a member of their ethnic group.

Indeed, it would be fruitful in future research to further consider the role of gender in associations between phenotypes and outcomes. Although gender differences in the importance of appearance can help explain some of the variation found, it is not entirely clear why ethnic identity exerted a protective function only for females. It also is unclear why ethnic identity did *not* moderate associations between phenotypes and income or physical health. Perhaps moderation in terms of psychological distress is to be expected due to the internal, affectively-based qualities of ethnic identity, but further research is needed to better understand these interactive processes (or lack thereof). It also would be highly informative to examine phenotypic processes in relation to other family members. Within the context of the family, one's consistency with phenotypes found in other family members may be particularly important in self-evaluations and outcomes. One can imagine implications of a situation in which one family member exhibits very ethnic features, but others in the family look more European. Research indeed suggests that appearance-related differences between parents and children can be perceived as threatening or indicative of the closeness between them (Pinderhughes, 1989). In addition, one of our theoretical assumptions was that phenotypes are associated with outcomes via indirect effects of phenotypic discrimination. However, complex links between phenotypes, discrimination, ethnic identity, and well-being have yet to be examined in Filipino Americans.

Despite providing provocative directions for future research, our results should be interpreted in light of limitations. First, our data were not longitudinal, which would be needed to make clear predictions about the directionality of phenotypic effects. Phenotypes also may have a differential impact on outcomes depending on specific stages of development. For instance, phenotypes could have a particularly strong association with outcomes during earlier stages of development when children and adolescents are still learning about their place in society and determining who they are. Second, in terms of measurement, biases could exist in that individuals who are already financially and socially successful evaluate their physical characteristics differently. For example, a "lightening" phenomenon suggests that the perception of skin color and physical traits may depend on the social

standing of the individual being perceived (Hill, 2000). This form of bias could have been offset by our use of combined self and interviewer reports; nevertheless, future research could benefit from a more sophisticated assessment of phenotypes, for instance, spectral photometry (Blazek and Wienert, 1979).

The next logical step in this line of work is to utilize our growing knowledge about phenotypes to improve everyday lives, social relationships, and well-being. Although the development of interventions may be premature, our results suggest that strengthening individuals' ethnic or group identity could help ameliorate some of the negative psychological effects of phenotypic bias.

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