

Effect of Cultural Priming on Asian American Females' Internalization of Mainstream Beauty Standards

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ABSTRACT

Westernization and patriarchal values implied in American society may cause young female Asian Americans living in the United States to be pressured to internalize the idealized, mainstream depiction of female beauty. The purpose of this study was to explore the impact of cultural priming on the degree of media internalization. Data were collected by online surveys with questionnaires of self-esteem, ethnic identity, media internalization, and response to cultural cues from Asian American females of ages 15 to 24 on July 28-August 12, 2023. Two versions of the survey were created to incorporate Asian cultural cues in one, and American cultural cues in the other. The 60 respondents were randomly assigned to either version, resulting in 30 respondents for each version. Questionnaire responses of 60 respondents were gathered, and all 60 were analyzed. The collected data were analyzed using descriptive statistics, Pearson's correlation coefficients, t-test, ANOVA, linear regression, and multiple regression. Results showed that the impact of cultural priming on media internalization was statistically not significant, while self-esteem, a distinct factor that was found to have associations with cultural priming and media internalization separately, had a significant negative association with media internalization. Further studies need to compare the self-esteem in women of different minority races in the United States to explore the effects of self-esteem on media internalization across groups of young women with different traditional customs and expectations.

Introduction

The existence of women's beauty standards dates back to the times of Ancient Greece, 500-300 B.C. The Greek's complex conception of female beauty is reflected in various modes of artistic interpretation, whether that would be in the form of literature such as the Greek mythology with Aphrodite, the ancient Greek goddess of sexual love and beauty, or the treasured Greek sculptures such as Venus de Milo and the Statue of Athena, both of which embody the "golden ratio" first mentioned in Euclid's Elements, the Classical Greek work on mathematics and geometry (Jess, M., 2021).

Yet, the twenty-first century seems to mark the peak of the value of beauty standards, as the shape of the "ideal" human face was first presented in 2001 by Doctor Stephen R. Marquardt, a surgeon who patented the Phi Mask. The Phi Mask uses the proportion of $\phi:1$, also known as the "golden ratio", which is proven to be the mathematical element to facial attractiveness (Swift, A., & Remington, K., 2011). Further research on the Phi Mask (Bashour, M., 2006) examines the validity of the application of the Phi Mask on the universal population. The results show that the Phi Mask "supports averageness or prototypicality of the face as being the major component of facial attractiveness and is an objective system for measuring facial attractiveness" (Bashour, M., 2006).

The feminine beauty ideal has a lot to do not only with women's faces but also with women's bodies. Today's "perfect body symbolizes control" (Barsky, 1988; Glassner, 1988). Control comes along with self-restraint and hard work that are recognized by those who also aspire to alter their bodies to match the ideal body (Brownell, K. D., 1991). The expected rewards of achieving an ideal body – compliments, recognition, increased confidence, greater ability to socialize or engage in a relationship, and so on – push many people to obsessively internalize media such as television, clothing advertisements, and social media (Glauert, R., Rhodes, G., Byrne, S., Fink, B., Grammar, K., 2009). Writer Penny Ward Moser (1989) described in her article in *Self* magazine that even an unrealistic Barbie doll may influence one's body ideal.

The influence of the modern beauty standards also seems to have engaged women as clients in the cosmetic surgery industry. This industry is projected to exhibit a market value annual growth rate of 9.6% from 2022 to 2030 (Grand View Research, 2018). Despite the cosmetic surgery industry having been proven its disadvantages such as body dysmorphic disorder being a relatively common psychiatric disorder among cosmetic surgery clients (Crerand, C. E., Franklin, M. E., Sarwer, D. B., 2006), it continues to attract new clients. Moreover, the overwhelming majority – 5 out of 6 – of plastic surgeons is male, so the decisions made in the cosmetic surgery industry may be highly influenced by male workers. In other words, although men present cosmetic surgery as a tool for women's empowerment and pleasure, the procedures, in turn, fabricate women's bodies into an object of consumption.

Mainstream media further reinforce the fabrication of women's appearances. The repetitive use of White or Eurasian models on the mainstream media compels Asian women to re-create themselves to match the highly desired, nearly unreal bodies that are widely promoted (Kim, T., 2003). There is a study (Chin Evans, P., & McConnell, A. R., 2003) that examined Asian American and Black women's self-evaluations of themselves based on Western beauty standards. The result of this study showed that Asian women were more likely to endorse mainstream beauty standards in a similar fashion to White women compared to Black women. Asian women also experienced greater dissatisfaction with their bodies than did Black women. While Black women found Western beauty standards less relevant to themselves, Asian American women were more likely to desire to meet the standards of Western ideals (Chin Evans, P., & McConnell, A. R., 2003).

Western beauty standards also contribute to the decreasing representation of physical features that do not align with the ideal features. The continuous imposition of the Western ideals on the general population exposes women of minority races in the United States to the pressure of manipulative industries. For example, *Alipay*, a mobile payment application with a high number of Chinese users, specifically targets females by strategically concealing the inconsistencies with the Western beauty standard in ethnically Asian women (Peng, A. Y., 2020). *Alipay* updated their face-scan payment system in 2019 to include "beauty filters" into the face recognition system by influencing women with the aesthetics of Western beauty (Peng, A. Y., 2020). This successful system update made a 123 percent increase in female users within weeks of launching the beauty filters. The increase in female users of a payment application may make this situation seem like a win-win situation where women are empowered through the independent use of a payment application while the company sees a satisfactory increase in application users. However, the company's hidden purpose of applying beauty filters on the face recognition system might be doing more harm than good on the female users – *Alipay*, in fact, targeted the vulnerability of Chinese women, those who live under patriarchal pressure to varying degrees (Jaschok, M., & Miers, S., 1994). Consequently, the autonomy of Chinese women is exploited through the reiteration of patriarchal values that confine Chinese women to specific forms of feminine beauty.

In sum, Asian American women have been passively accepting idealized, mainstream depiction of female beauty under the pressure of the Western ideals and the male-dominated world. (Guan, M., Lee, F., & Cole, E. R., 2012) and (Ju, S. J., Cha, H. G., & Kang, G. Y., 2016) tried to make implications for understanding the relationship between culture and beauty ideals in Asian-Americans in their 20s. However, to my best knowledge, there has been no study focusing on Generation Z (between 9 and 24 years old), the contemporary youth known to be "digital natives", according to Prensky (2001). Generation Z has never experienced life before

the Internet, living in an “era in which technology is so readily accessible at such a young age” (Prensky, M., 2001). Knowing that the use of media is a factor that highly contributes to the internalization of mainstream beauty standards (Vandenbosch, L., & Eggermont, S., 2012), 15- to 24-year-olds in Generation Z have been selected for the study.

The current study seeks to fill this gap and contribute to addressing the aforementioned issues. To achieve this end, the study examines if cultural priming using Asian cultural cues influences Asian American women’s degree of media internalization, focusing on young females of ages 15 to 24 identifying as Asian-American who have grown up immersed in both Asian and mainstream American cultures. The study utilizes two main variables, self-esteem, and affiliation with an Asian ethnic group. It is hypothesized that with recent exposure to Asian cultural symbols or activation of Asian cultural values and beliefs, self-esteem and affiliation with an Asian ethnic group would be negatively associated with internalization of mainstream societal expectations on appearance. This would mean that exposure to Asian cultural cues used for cultural priming decreases the degree of media internalization in young Asian American women.

Method

Participants

A total of 60 Asian-American women participated in this study (mean age = 17.38 years, SD = 1.89 years). Participants were included only if they were in the age range of age 15 through age 24, female, currently living in the United States, and self-identified as East Asian (e.g., Korean, Chinese, or Taiwanese) or Southeast Asian (e.g., Filipino, Vietnamese).

Data Collection

The subjects were randomly split into two groups of 30 – Group A (mean age = 16.93 years), Group B (mean age = 17.80). Group A completed Version A and Group B completed Version B of the survey (cultural cues variable section below explains why there are two versions of the survey). From July 28th to August 12th of 2023, participants were directed to fill out an online survey. The survey included demographic items (i.e., age, gender, years living in the United States, height, weight, and Body Mass Index (BMI, calculated using the formula $BMI = 703 * (\text{weight}) / (\text{height})^2$)). After providing informed consent, participants were asked to respond to items regarding the variables below.

Variables

Media Internalization

The Sociocultural Attitudes Towards Appearance Questionnaire-3 (SATAQ-3; Thompson, J. K., Van den Berg, Roehrig, Guarda, & Heinberg, 2004) was used to assess individuals’ tendencies to internalize societal expectations about appearance. (e.g., "I compare my appearance to the appearance of TV and movie stars"). The SATAQ-3 uses a 5-point response scale, ranging from 1 (definitely disagree) to 5 (definitely agree), with higher scores indicating higher levels of media internalization. Items were averaged for analyses. Strong internal consistency (Cronbach's alpha of .92) was reported for the SATAQ-3 scale.

Self-Esteem

The Rosenberg Self-Esteem scale (RSE; Rosenberg, 1965) was used to measure self-worth of each subject. RSE is a 10-item measure of general self-esteem (e.g., "I feel that I'm a person of worth, at least on an equal plane

with others"). The RSE uses a 4-point scale, ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating higher self-esteem. Item responses were averaged for analyses. Silber and Tippett (1965) reported the RSE has a 2-week test-retest reliability of .85 and that it converges well with other measures of self-esteem. Among Asian Americans, R. M. Lee (2003) reported an internal consistency reliability of .88 for the RSE.

Ethnic Identity

The most recent version of Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) was used to record each subject's self-assessment on their affiliation with their respective ethnic group(s). MEIM has 13 items that measure an individual's ethnic identity exploration, sense of ethnic belonging and affirmation, and involvement in ethnic behaviors. A sample item is "I am active in organizations or social groups that include mostly members of my own ethnic group." The MEIM is rated on a 4-point response scale, ranging from 1 (strongly disagree) to 4 (strongly agree), with higher scores indicating higher ethnic identity. Phinney (1992) reported a Cronbach's alpha of .90 of the MEIM in a diverse young adult sample. Among Asian Americans, the MEIM has been found to demonstrate concurrent validity through correlations with measures of social connectedness and self-esteem (Lee, R. M., 2003) and a Cronbach's alpha of .89 (Phan & Tylka, 2006). The current study averaged item responses to the tenth decimal place to yield an accurate scale score.

Cultural Cues

To examine the extent to which cultural cues in the environment have an effect on perceptions of beauty standards presented in mainstream media, participants were randomly assigned to view a series of either Asian or American cultural cues. 30 participants were assigned to Group A to complete survey Version A, the survey with Asian cultural cues; the other 30 participants were assigned to Group B to complete survey Version B, the survey with American cultural cues. Cultural cues used in the survey included images used in past studies on cultural priming¹ of Asian-American bicultural individuals (Benet-Martinez, Lee, & Leu, 2006; Benet-Martinez, Leu, Lee, & Morris, 2002; Hong, Morris, Chiu, & Benet-Martinez, 2000). "To ensure each picture strongly represents either Asian or American culture, images selected for cultural cues were those that have been pretested to rate the extent to which each picture represented Asian and American cultures" (Guan, Lee, & Cole, 2012). Only images that had indication of a high extent to which it represented one of the two cultures were included in the survey (Guan, Lee, & Cole, 2012).

Data Analysis

A simultaneous multiple regression was run with SATAQ-3 test results as the dependent variable. MEIM and Rosenberg test results were entered as predictors and randomly assigned cultural cues and BMI were included as covariates. All numerical data from data analyses were rounded to the nearest hundredth.

Results

Participant Characteristics

¹ An approach that tests how brain activities underlying various cognitive or affective processes are modulated by recent exposure to specific cultural symbols or activation of specific cultural values and beliefs (Han, S., & Northoff, G., 2020)

The General characteristics of the study subjects in Group A (Asian cultural priming) and Group B (American cultural priming) are shown in Table 1. For both Group A and Group B, participants' ages and years living in the United States varied, ages ranging from 15 to 24 years, and years living in the United States ranging from 1 to 23 years. In Group A, the ethnicity breakdown was like so: 63.3% identified as Korean, 30.0% identified as Chinese, 3.3% identified as Taiwanese, and 1 participant 3.3% identified as Korean-Norwegian. In Group B, the ethnicity breakdown was like so: 30.0% identified as Korean, 33.3% identified as Chinese, 13.3% identified as Taiwanese, 6.7% identified as Vietnamese, 3.3% identified as Burmese, 6.7% identified as Filipino, 3.3% identified as half Korean and half Chinese, and 3.3% identified as mixed Asian and Latina.

Table 1. General Characteristics of Participants

Characteristics	Categories	Group A n(%), M±SD (N=30)	Group B n(%), M±SD (N=30)
Age (years)	Average	16.93±1.39	17.8±2.21
	15-16	12(40.0)	7(23.3)
	17-18	13(43.3)	16(53.3)
	19-20	5(16.7)	2(6.7)
	21-22	N/A	3(10.0)
	23-24	N/A	2(6.7)
Ethnicity	Korean	19(63.3)	9(30.0)
	Chinese	9(30.0)	10(33.3)
	Taiwanese	1(3.3)	4(13.3)
	Korean-Norwegian	1(3.3)	N/A
	Vietnamese	N/A	2(6.7)
	Burmese	N/A	1(3.3)
	Filipino	N/A	2(6.7)
	Half Korean, half Chinese	N/A	1(3.3)
	Mixed Asian and Latina	N/A	1(3.3)
Years living in the US (years)	Average	11.65±5.26	13.6±6.25
	1-3	2(6.7)	2(6.7)
	4-6	3(10.0)	5(16.7)
	7-9	6(20.0)	1(3.3)
	10-12	5(16.7)	2(6.7)
	13-15	5(16.7)	6(20.0)
	16-18	6(20.0)	8(26.7)
	19-21	3(10.0)	4(13.3)
	22-24	N/A	2(6.7)
	BMI	Average	20.66±2.61
<18.5 (underweight)		6(20.0)	9(30.0)
18.5-24.9 (healthy weight)		23(76.7)	13(43.3)
25-29.9 (overweight)		1(3.3)	8(26.7)
≥30 (obese)		N/A	N/A

Descriptive Statistics for Variables

Descriptive statistics for young Asian women's degree of media internalization, self-esteem, and ethnic identity derived from the results of survey Version A and Version B are shown in Table 2. In Group A, the mean degree of internalized societal expectations about appearance was 3.02 ± 0.55 point (range 1.00-5.00 point), the lowest was 1.93 point, and the highest was 3.97 point. 1.00 points means “definitely disagree” and 5.00 points means “definitely agree” to the prompts that indicate the lowest media internalization score when they are definitely disagreed, and the highest media internalization score when they are definitely agreed. Group A, therefore, had an average SATAQ-3 scale score that was 0.02 points above the average of the range which is 3.00. This indicates that participants in Group A had a slightly high degree of media internalization. The mean level of self-esteem was 27.07 ± 4.72 point (range 10-40 point), the lowest was 17 point, and the highest was 39 point. 10 points means 10 responses of “strongly disagree” and 40 points means 10 responses to “strongly agree” to the prompts that indicate the lowest self-esteem score when they are strongly disagreed, and the highest self-esteem score when they are strongly agreed. This indicates that overall, Group A had a high score in the self-esteem category because the average of 30 participants was higher than the average of the range which is 25. The mean level of ethnic identity was 3.29 ± 0.37 point (range 1.00-4.00 point), the lowest was 2.58 point, and the highest was 4.00 point. 1.00 points means “strongly disagree” and 4.00 points means “strongly agree” to the prompts that indicate the lowest ethnic identity score when they are strongly disagreed, and the highest ethnic identity score when they are strongly agreed. Group A participants had a high average ethnic identity score – 3.29 points being way above 2.50 points which is the average of the range. In Group B, the mean degree of media internalization was 3.24 ± 0.69 point (range 1.00-5.00 point), the lowest was 1.87 point, and the highest was 4.83 point. This seems to be higher than the mean of Group A, indicating a group of participants with higher degree of media internalization than the general average and the group compared with.

Table 2. Descriptive Statistics for Variables

Variables	Range	M±SD		Minimum		Maximum	
		Group A	Group B	Group A	Group B	Group A	Group B
SATAQ-3	1.00-5.00	3.02 ± 0.55	3.24 ± 0.69	1.93	1.87	3.97	4.83
Rosenberg scale	10-40	27.77 ± 4.72	26.10 ± 6.21	17	10	39	38
MEIM	1.00-4.00	3.29 ± 0.37	3.13 ± 0.40	2.58	2.42	4.00	3.92

Table 3. Correlation among Main Variables (Group A – left, Group B – right)

	Media Internalization	Self-esteem	Ethnic identity		Media Internalization	Self-esteem	Ethnic identity
Media Internalization	1			Media Internalization	1		
Self-esteem	-0.39	1		Self-esteem	-0.37	1	
Ethnic identity	0.16	0.21	1	Ethnic identity	-0.05	0.22	1

Table 4. Significance of Correlation between Self-esteem and Media Internalization

	t-Stat	P-value		t-Stat	P-value
Group A Self-esteem	2.54	0.02	Group B Self-esteem	2.08	0.05

The mean level of self-esteem was 26.10±6.21 point (range 10-40 point), the lowest was 10 point, and the highest was 38 point. Group B scored slightly lower in the self-esteem category compared to Group A, but the score was still above the general range average of 25 points. The mean level of ethnic identity was 3.13±0.40 point (range 1.00-4.00 point), the lowest was 2.42 point, and the highest was 3.92 point. This score seems to be lower than Group A's indicating Group B participants having lower ethnic identity than Group A participants. Still, Group B scored higher than the general average of 2.50 points, indicating a high average ethnic identity score.

Correlation Among Main Variables

The correlations and the significance of the correlations among main variables self-esteem and media internalization in Group A and Group B are shown in Table 3 and Table 4. Compared to Group B data ($r=-0.37$, $p=0.05$, $t=-2.08$), Group A data ($r=-0.39$, $p=0.02$, $t=-2.54$) presented higher statistical significance in the relationship between the self-esteem and the media internalization variables. Regardless, Group A and Group B data both showed to be statistically significant due to their p values being $<.05$. While there was an observation like so in the first correlation observed, there was found to be a significantly low correlation between ethnic identity and media internalization in both groups. This is evidence that ethnic identity is not the most important factor in influencing what an individual's degree of media internalization would be. Therefore, the significance of the correlation between ethnic identity and media internalization was not tested while the significance of the correlation between self-esteem and media internalization was tested.

Hypothesis Testing

The overall multiple regression model was found to be significant in Group A ($F(2, 27) = 3.65$, $p<.05$), and not significant in Group B ($F(2, 27) = 2.21$, $p>0.1$), as seen in Figure 1. The multiple regression output for Group A is in line with my hypothesis – Group A which took the survey with Asian cultural cues for cultural priming were shown to have a lower tendency to internalize social expectation on appearance when their ethnic identity, and especially, their self-esteem was reported to be relatively high, compared to group B. Figure 1 proves that out of the main variables, self-esteem is the variable that is most closely associated with media internalization, as the t-value ($t = -2.54$) from Figure 1 measures high statistical significance of the "self-esteem" variable in explaining the dependent variable "degree of internalized societal expectations about appearance". Figure 2 presents a negative association between the Self-esteem variable and the Media Internalization variable in both Group A and Group B. However, the multiple regression output for Group B lacked statistical significance. It was difficult to conclude the examination of whether there would be a negative correlation between a young Asian American woman's self-esteem and ethnic identity and the degree of media internalization in their lives.

Table 2. Descriptive Statistics for Variables

Variables	Range	M±SD		Minimum		Maximum	
		Group A	Group B	Group A	Group B	Group A	Group B
SATAQ-3	1.0005.00	3.02±0.55	3.24±0.69	1.93	1.87	3.97	4.83

Rosenberg scale	10-40	27.77±4.72	26.10±6.2	17	10	39	38
MEIM	1.00-4.00	3.29±0.37	3.13±0.40	2.58	2.42	4.00	3.92

Table 3. Correlation among Main Variables (Group A – left, Group B – right)

	Media Internalization	Self-esteem	Ethnic identity		Media Internalization	Self-esteem	Ethnic identity
Media Internalization	1			Media Internalization	1		
Self-esteem	-0.39	1		Self-esteem	-0.37	1	
Ethnic identity	0.16	0.21	1	Ethnic identity	-0.05	0.22	1

Table 4. Significance of Correlation between Self-esteem and Media Internalization

	t-Stat	P-value		t-Stat	P-value
Group A Self-esteem	2.54	0.02	Group B Self-esteem	2.08	0.05

Other Variables Tested

To evaluate the strength of association between other relevant variables: BMI and SATAQ-3 scale scores (see 2.3. Variables.), I set a null hypothesis: there is no relationship between BMI and SATAQ-3 scale scores, and an alternative hypothesis: There is a positive relationship between BMI and SATAQ-3 scale scores. I used ANOVA (see Table 5) to check the probability that the null hypothesis in my regression model will be rejected. The resulting correlation coefficient, R-value of $R = 0.15$, can be interpreted as evidence for a weak linear relationship between BMI and the degree of media internalization. A value of 1 means a perfect positive relationship and a value of zero means no relationship at all, hence, $R = 0.148$ represents low association between the two variables examined. The R value of $R = .148$ was a similar value to .18, which is shown in the previous study (Thompson, J. K., Van Den Berg, P., Roehrig, M., Guarda, A. S., & Heinberg, L. J., 2004) that states “the rs for age and body mass index (BMI) indicate a very low association between these two variables and the SATAQ-3 subscales, with only one correlation being significant (SATAQ-3 Pressures and BMI = .18)”. Therefore, it is to be concluded that BMI and media internalization are two variables found to have low association.

SUMMARY OUTPUT		ANOVA					
		df	SS	MS	F	Significance F	
Regression Statistics		Regression	2	1.86	0.93	3.65	0.04
Multiple R	0.46	Residual	27	6.88	0.25		
R Square	0.21	Total	29	8.74			
Adjusted R Square	0.15						
Standard Error	0.50						
Observations	30						
		Coefficients	Standard Error	t Stat	P-value		
		Intercept	3.17	0.92	3.43	0.00	
		Self-esteem	-0.05	0.02	-2.54	0.02	
		Ethnic Identity	0.38	0.26	1.44	0.16	

SUMMARY OUTPUT		ANOVA					
		df	SS	MS	F	Significance F	
Regression Statistics		Regression	2	1.95	0.97	2.21	0.13
Multiple R	0.37	Residual	27	11.90	0.44		
R Square	0.14	Total	29	13.85			
Adjusted R Square	0.08						
Standard Error	0.66						
Observations	30						
		Coefficients	Standard Error	t Stat	P-value		
		Intercept	4.16	1.02	4.08	0.00	
		Self-esteem	-0.04	0.02	-2.08	0.05	
		Ethnic Identity	0.06	0.32	0.19	0.85	

Figure 1. Multiple Regression Summary Output (Group A – top, Group B – bottom)

Note. data analysis was run with SATAQ-3 test results as the dependent variable. MEIM and Rosenberg test results were entered as predictors.

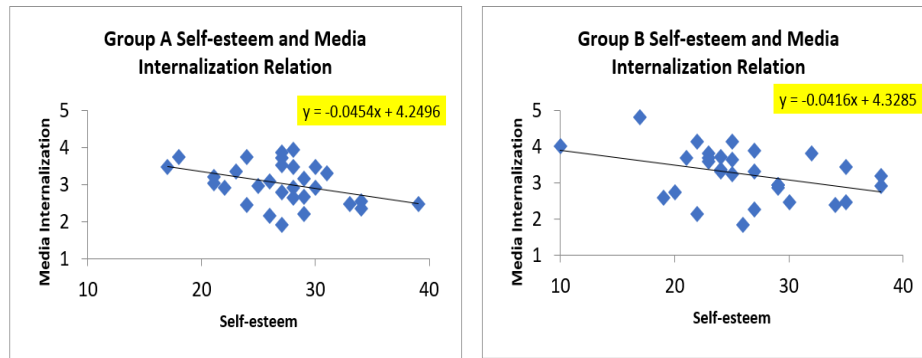


Figure 2. Relationship between Self-esteem and Media Internalization in Group A and Group B

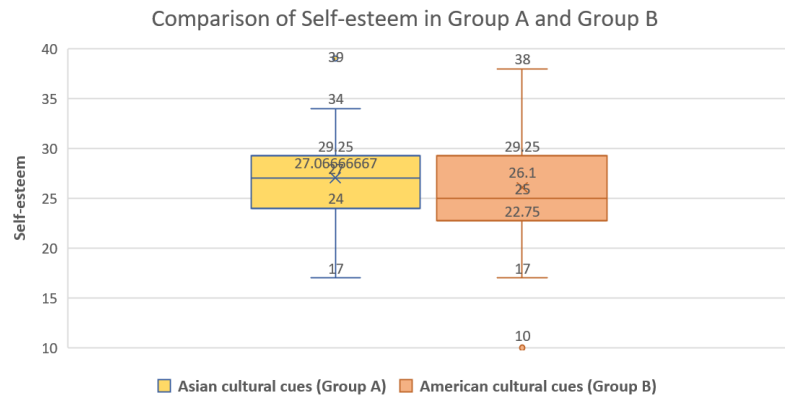


Figure 3. Comparison of Self-esteem in Group A and Group B

Note. Comparison of self-esteem of two different groups exposed to different cultural cues observed to find association between self-esteem and the effects of cultural priming.

Additionally, a positive association was to be found in the self-esteem variable measured by the Rosenberg scale test and the ethnic identity variable measured by the MEIM test (see Figure 4). The importance of this association to the study is to be further considered in the Discussion section.

Discussion and Conclusion

This study was conducted to find out if cultural priming using Asian cultural cues has an effect on Asian American women’s degree of media internalization. Investigated factors included each subject’s self-esteem, ethnic identity, and response to cultural cues. The study result showed that for young Asian American women with recent exposure to Asian cultural cues, their self-esteem and ethnic identity were in a relatively significant negative correlation with the degree of media internalization, so this result concurred with the hypothesis. However,

there seemed to be no direct association between the effect of cultural priming and the degree of media internalization.

Self-esteem appears to be the most relevant factor that affects young Asian American women’s degree of media internalization. Examples of proof that there is statistical significance in the correlation between self-esteem and media internalization include: t-stat value of 2.54 in Group A and 2.08 in Group B, p-value of 0.02 in Group A and 0.046 in Group B (Figure 1) when the null hypothesis is that there is no relationship between self-esteem and media internalization. The t-stat values over positive 2 is an indicator of significant evidence against the null hypothesis. The p-values are less than 0.05 in both groups; thus, they show statistical significance and reject the null hypothesis.

Table 5. Correlation between overall BMI and Media Internalization – Linear Regression Summary Output

Regression Statistics	
Multiple R	0.15
R Square	0.02
Adjusted R Square	0.01
Standard Error	0.63
Observations	60

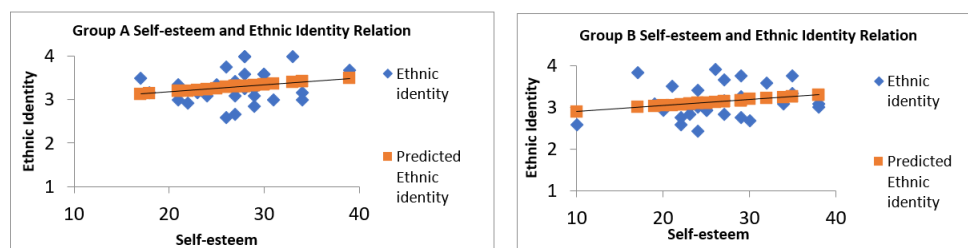


Figure 4. Relation between Self-esteem and Ethnic Identity examined in Group A and Group B

From the MEIM test that measures an individual's ethnic identity on a scale of 1 to 4, 1 being having the lowest ethnic identity possible and 4 being having the highest ethnic identity possible, a 0.17-point difference was observed, where Group A mean value of 3.29 ± 0.37 points was slightly higher than Group B mean value of 3.13 ± 0.40 points. Observed in both Group A and Group B were high MEIM scores well over 2.5 points, the average between lowest and highest points possible. Although high MEIM scores may seem like an indicator of a contributing factor to a correlation with media internalization, there is a slim difference between the two groups’ scores. Additionally, discovered was a low correlation between ethnic identity and media internalization in both groups (see section 3.3.). These are pieces of evidence that ethnic identity is not the most important factor in influencing what an individual’s degree of media internalization would be. And, as seen in section 3.5., ethnic identity has a positive correlation with self-esteem but shows no other apparent correlation with the remaining variables. Similarly, (Cheng, H. L., 2014) found ethnic identity was positively associated with self-esteem but unrelated to disordered eating, a pattern also found by Phan and Tylka (2006). In the same study, an association between high ethnic identity and low body dissatisfaction was found. Body dissatisfaction, disordered eating, and media internalization are all linked as each other’s causes and effects; “a significant factor in disordered eating attitudes is social media, by which unrealistic beauty ideals are popularized.” (Aparicio-Martinez, P., Perea-Moreno, A. J., Martinez-Jimenez, M. P., Redel-Macías, M. D., Pagliari, C., & Vaquero-Abellan, M., 2019) In the current study, multiple regression was run with ethnic identity and self-esteem as predictors for

media internalization, the dependent variable. The data analysis result showed negative correlation between the two predictors and the dependent variable, meaning the result of this study can be used to confirm the negative association between ethnic identity and body dissatisfaction found in (Cheng, H. L., 2014). This pattern is consistent with theoretical views about the protective nature of ethnic identity (Croll et al., 2002), but not consistent with studies that did not find such a link (Iyer & Haslam, 2003; Phan & Tylka, 2006). Further research into the influence of ethnic identity on young Asian American women is needed to clarify the role ethnic identity plays in the mitigation of media internalization.

When randomly assigned to view either Asian or American cultural cues, while subjects exposed to Asian cues scored 0.967 points higher on the Rosenberg Scale than those exposed to American cues (see Figure 3), the p-value in the variance of the two groups' self-esteem average score was 0.07 (>0.05) (see Table 6). This p-value ($p = 0.07$) means the difference in assigned cultural cues did not generate a high variance in self-esteem scores of the two groups, the widest score gap possible being 30 points on the Rosenberg scale of 10 to 40 points. Because self-esteem score has a distinct relation with media internalization score, Group A and Group B self-esteem scores needed to vary to a greater extent to proceed with elaboration on the difference in the degree of media internalization in the two groups exposed to different cultural cues. This study concludes that the effect of cultural priming was not significant to the Rosenberg scale scores, hence, cultural cues had no causal effect on self-esteem nor the degree of media internalization. This outcome is not consistent with (Guan, Lee, & Cole, 2012) which shows that cultural cues in the environment have a causal effect on perceptions of beauty standards influenced by the degree of media internalization. (Guan, Lee, & Cole, 2012) was a study done on 89 participants with a mean age of 20.81 years, while the current study looked at 60 participants with a mean age of 17.38 years. The difference in the study results may derive from the idea that teenagers are more malleable and accepting of changes due to their higher level of curiosity and risk-taking tendencies compared to older groups in their 20s or 30s (Steinberg, L., 2004). The discrepancy in the effects of cultural priming on media internalization may also come from the fact that one-time exposure may not be enough to determine the actual effects of cultural priming. The degree of cultural priming through presentation of different numbers of sets of cultural cues may differ in each study, causing different results to emerge.

The judgment on the relevance of the mainstream beauty standards may, therefore, depend on one's self-esteem more than other factors discussed (ethnic identity and BMI). It is clear that the lower one's self-esteem is, the higher the degree of mainstream media internalization. (Chin Evans, P., & McConnell, A. R., 2003) showed how women of different races presented different levels of media internalization because they had different opinions on how relevant Western ideals are to their specific race. By examining the difference in self-esteem in women of different minority races, it is predicted that more about the effects of self-esteem on media internalization can be learned. Also, by taking this approach, factors that contribute to relatively low self-esteem in Asian American women will be more likely to be observed.

Additionally, the validation of the significance of the hypothesis (see 3.4. Hypothesis Testing) confirms that a more extensive analysis of this hypothesis is relevant to the results of the current study. A positive association was to be found in the self-esteem variable measured by the Rosenberg scale test and the ethnic identity variable measured by the MEIM test (see Figure 4). Further examined should be the reason behind the existence of the association between the extent to which one identifies with an Asian culture and one's level of self-esteem.

Table 6. Variance of Self-esteem in Group A and Group B analyzed with F-Test Two Sample for Variances

	Asian cultural cues (Group A)	American cultural cues (Group B)
Mean	27.07	26.1
Variance	22.27	38.51
Observations	30	30
df	29	29
F	0.58	
P(F<=f) one-tail	0.07	
F Critical one-tail	0.54	

Lastly, the comparisons of East Asian and Southeast Asian samples, and of samples varying in years living in the United States or generational status (first-generation or second-generation Americans) showed no significant differences, similar to previous studies on bicultural individuals in the United States (Benet-Martinez & Haritatos, 2005; Guan, Lee, & Cole, 2012), in which the effects found in East Asians and Southeast Asians were similar, and therefore, combined the analyses of these two groups, still producing an acceptable study result. However, there may be more detailed differences between different Asian ethnic and national groups and those of different generational status regarding the perception and the degree of internalization of beauty standards presented in mainstream media. These particular differences have not been clearly captured in the current study but should be examined in future studies with a more direct focus on ethnicity or generational status variance.

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