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Exploring Body Satisfaction and Physical Activity Levels Among Collegiate Females: A Cross-Cultural Comparison

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ABSTRACT

Purpose: This study examined the correlation between physical activity level, weight status perception, and body satisfaction among female college students in the United States (n = 192) and South Korea (n = 198).
Methods: Data was collected through a self-reported questionnaire that included demographic information, Body Dissatisfaction Scale-Eating Disorders Inventory (BDS-EDI), International Physical Activity Questionnaire (IAPQ) short form, and Objectified Body Consciousness Scale (OBS).
Results: The results revealed no significant correlation between physical activity levels and body satisfaction among female college students in both countries. However, South Korean students reported higher levels of body dissatisfaction compared to their American counterparts (body dissatisfaction scores: South Korean 31.86 > American 28.21; body shame scores: South Korean 26.54 > American 22.40). American students also reported higher levels of physical activity than South Korean students (total recreation METs: South Korean 99.60 < American 1987.07). The preference for specific types of exercise did not affect weight status (BMI) in either group. However, BMI showed a significant relationship with body dissatisfaction in both American and South Korean students ($p < .001$).
Conclusion: Physical activity levels did not seem to directly impact body satisfaction among female college students in South Korea and the United States.
Keywords: body dissatisfaction, cross cultural, women

1. INTRODUCTION

Body image, encompassing an individual's internal perception of their external appearance, has become a focal point of global scrutiny and scholarly inquiry (Holland & Tiggemann, 2016). Related to the concept of body image, body satisfaction denotes the subjective assessment and contentment regarding one's physical attributes, encompassing appearance, body size, shape, and overall physique (Groesz, Levine, & Murnen, 2002). The prevailing ideal body archetype, particularly concerning women, is significantly molded by the influence of Western mainstream media and popular culture (Levine & Murnen, 2009). This archetype extols the virtues of height, thinness, and a well-toned physique (Levine & Murnen, 2009). Paradoxically, a substantial number of young women, despite often aligning with medically-defined average or healthy weight categories, frequently perceive themselves as overweight. This distorted self-perception arises from the pervasive portrayal of body weight in media that deviates from reality (Chang & Christakis, 2003). The resultant dissonance between self-perception and actuality yields to adverse consequences, including lowered

self-esteem and heightened susceptibility to mental health issues such as stress, depression, and debilitating eating disorders, including bulimia nervosa and anorexia (Garner & Garfinkel, 1980). The influence of media on body image is further compounded by women's proclivity to juxtapose their physiques with revered public figures, such as actresses, models, and vocalists (Crago & Shisslak, 2003). A compelling illustration of this phenomenon can be discerned in the study conducted by Rubinstein and Caballero (2000) which highlights a consistent decline in the Body Mass Index (BMI) of beauty pageant winners, esteemed as epitomes of beauty in the United States. This decline has transitioned from an average range of 20-25 in the 1920s to below 18.5 in the late 1990s (Rubinstein & Caballero, 2000).

Body image satisfaction also may vary due to cultural, gender, and ethnic differences (Allaz et al., 1998). In many Asian cultures, the criteria for beauty have shifted from traditional to Western standards (Hausenblas & Fallon, 2006). According to Oh, (2004) there is an even greater focus on body weight among Korean women than women in other Asian countries. The Korean media displays its influence of Western culture by promoting thin bodies and using Caucasian models. These images may be the catalyst for the desire in Korean women to achieve the perceived ideal body shape of Western women. This influence may also contribute to the reason Korean women in their twenties have indicated an increase in negative mood and body dissatisfaction following exposure to Thinness Promoting Messages (TPM) advertising (Hong & Lee, 2005). As evidenced by previous research, multiple factors are involved in understanding body awareness and satisfaction and many of these factors transcend racial and ethnic boundaries.

With the increased emphasis on Western cultural body norms and decrease in body satisfaction and mood, improving self-perception and body satisfaction have gradually become important. One potential way to improve overall perception of body image is through physical activity. Research has demonstrated that physical exercise has a significant impact on body image in women (Goswami, Sachdeva, & Sachdeva, 2012; Pinheiro Ferrari, Santos Silva, & Luiz Petroski, 2012; Vurgun, 2015), and this effect can occur regardless of the type of exercise. For example, researchers have observed more positive body image in participants who engage in aerobic exercise (Vurgun, 2015) as well as elderly individuals who engage in a physical training program (Bergland, et al., 2018). Conversely, those individuals who are more physically inactive (Ferrari, Petroski & Silva, 2013) and overweight (Goswami et al., 2012) were shown to experience an increased level of body image dissatisfaction. Others have also shown that regular physical activity is inversely related to the prevalence of physical and psychological issues, including cardiovascular disease, thromboembolic stroke, hypertension, type

2 diabetes, depression, and many others (DeBate, Pettee Gabriel, Zwald, Huberty, & Zhang, 2009; Dishman, Motl, Saunders, Felton, Ward, Dowda, & Pate, R., 2004; Kesaniemi, Danforth, Jensen, Kopelman, Lefèbvre, & Reeder, 2001; Kilpatrick, Hebert, & Bartholomew, 2005). To further complicate matters, research has also indicated an increased likelihood for women to experience more clinically significant symptoms of depression if suffering from co-occurring body dissatisfaction (Jackson et al., 2014). Thus, physical activity can improve body satisfaction, which may in turn enhance physical and mental health. However, despite the evidence demonstrating the vast benefits of exercise, college-age students in both South Korea and the United States do not achieve the amount of physical activity recommended by standard agency guidelines (Yates, Edman, & Aruguete, 2014).

Physical activity recommendations for college-aged females include engaging in at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity aerobic activity per week, coupled with muscle-strengthening activities on two or more days a week (Piercy et al., 2018). However, existing data suggest that many college-aged females do not meet these physical activity recommendations (O'Dougherty et al., 2012.

While many studies have examined the effects of physical activity on body satisfaction, few have considered the association between body satisfaction and specific types and levels of physical activity, particularly within the context of cross-cultural comparison. Therefore, the purpose of this study was to investigate the relationship between physical activity levels, self-perception of weight, and body satisfaction among female college students. Furthermore, this study is an attempt to compare these relationships between two culturally diverse college student populations in the United States and South Korea. Finally, this study also explored the relationship between body weight and preferred types of physical activity in these populations.

2. METHODS

The current research protocol was approved by the host University Institutional Review Board. Subject recruitment occurred through email invitations, utilizing a web-based survey instrument hosted on Survey Monkey. For the American cohort, recruitment emails were distributed to female students within the College of Health at a Midwestern university in the United States. This outreach took place on two separate occasions: initially at the conclusion of the spring semester and subsequently at the commencement of the summer semester, with a two-week interval between the two email solicitations. The second email included a disclaimer, instructing those who had already completed the survey to disregard the

follow-up solicitation. Data collection transpired over four weeks, involving two solicitation attempts. Among the total population of 975 eligible female students at the American university, 192 questionnaires were successfully completed (resulting in a 19.7% return rate), thereby constituting the American participant pool for this study.

To ensure a cross-cultural sample, an analogous recruitment email was dispatched to South Korean students within the College of Health Sciences at a university in northwest South Korea. This email provided a comprehensive description of the study and extended an invitation for voluntary participation. Also, the email included the study's purpose, briefly outlined the survey instrument, and offered detailed information on the consent process. Subsequently, participants were directed to a hyperlink where they could complete the online survey. To accommodate Korean students, and help ensure that the survey items were fully comprehensible the survey forms were translated from English to Korean. The translation was conducted by a co-author proficient in both English and Korean. Data were collected in both English and Korean. Among the entire eligible cohort of female students at the South Korean university (N=1,002 individuals), 198 questionnaires were completed in their entirety (i.e., a 19.8% return rate), which corresponded to the South Korean participant pool for this study. This return rate was consistent with established industry standards in the field (Nulty, 2008).

2.1 Participants

A total of 390 female college students took part in the present study. The sample included 198 participants from a university in South Korea, with ages ranging from 18 to 30 years (mean age = 21.8 years, *SD* = 2.5 years), and 192 participants from a university in the Midwestern United States, with ages ranging from 18 to 28 years (mean age = 20.3 years, *SD* = 1.8 years). In the South Korean group, heights ranged from 150 centimeters (4.92 ft.) to 175 centimeters (5.74 ft.), with a mean height of 162.8 centimeters (5.34 ft., *SD* = 4.2 cm). For the American group, heights ranged from 152 centimeters (4.99 ft.) to 188 centimeters (6.17 ft.), with a mean height of 165.8 centimeters (5.44 ft., *SD* = 6.1 cm). South Korean participants' weights ranged from 42 kg (92.6 lbs.) to 74 kg (163 lbs.), with a mean weight of 53.4 kg (117.7 lbs., *SD* = 7.8 kg). American participants' weights ranged from 38 kg (83.8 lbs.) to 152 kg (335 lbs.), with a mean weight of 67.8 kg (150 lbs., *SD* = 19.5 kg).

2.2 Instrumentation

Three different questionnaires were utilized to determine the relationship between the level of physical activity and body satisfaction: the Body Dissatisfaction Scale-Eating Disorders Inventory (BDS-EDI) (Garner & Garfinkel, 1980) the International Physical Activity Questionnaire (IPAQ) short form, and the Objectified Body Consciousness Scale (OBCS) (McKinley & Hyde, 1996). In addition to completing the questionnaires, participants also provided demographic information. The demographic data included major, age, ethnicity, gender, grade point average, and year in school. The BDS-EDI questionnaire, validated by Garner, Olmstead, and Polivy (1983), was used to collect data specific to body dissatisfaction. The original questionnaire consisted of eight items, corresponding to drive for thinness, interceptive awareness, bulimia, body dissatisfaction, ineffectiveness, maturity fears, perfectionism, and interpersonal distrust. For the purpose of this study, only the items related to body dissatisfaction were used.

The OBCS questionnaire, founded in feminist theory regarding body image and social constructs, was developed by McKinley and Hyde (1996). This questionnaire consisted of three eight-item subscales: body surveillance, body control, and body shame. In the current study, only the body shame subscale was used due to the study's primary focus on perceptions of one's own body.

To evaluate participants' physical activity levels, the IAPQ short form was also employed. This questionnaire consisted of five activity domains: job-related physical activity, transportation physical activity, house work, house maintenance, and caring for family, recreation, sport, and leisure-time physical activity, and time spent sitting (Craig et al., 2003). Both the BDS-EDI and OBCS questionnaires included a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). To ensure accurate interpretation for Korean participants, the English versions of the questionnaires were translated to Korean by one of the co-authors, with bilingual skills in Korean and English.

2.3 Statistical Analysis

Descriptive statistics, analysis of variance (ANOVA), correlation analysis, multiple regression analyses, and Chi-square tests were performed. The data were analyzed using IBM SPSS Statistics (Version 27). To examine the impact of independent variables (i.e., body dissatisfaction, body shame) on dependent variables (i.e., frequency of exercise, duration of exercise, BMI), three multiple regression analyses were conducted. To control for type I error, a conservative alpha level ranging from .05 to .01 was selected for the regression analyses. Cross-tabulation analysis was employed to explore the relationship between BMI levels and preferred types of exercise. Post-hoc statistical power analyses indicated a high power level of 99.9% for both the

Korean participants (n = 198) and the American participants (n = 192), considering the number of predictors (2), observed R square, and a probability level of .05.

3. RESULTS

Participants were classified into one of four BMI categories including obese, overweight, normal weight, and underweight, based on CDC standards. Among the American female students, descriptive statistics indicated that 13% were obese, 25% were overweight, 57.8% were normal weight, and 4.2% were underweight. Among the South Korean female students, 2.5% were overweight, 80.3% were normal weight, and 17.2% were underweight. The results revealed that the South Korean students' overall body size was smaller than that of the American students, with a higher proportion of South Korean students falling into the normal BMI category and no South Korean participants meeting the criteria for obese.

Mean scores for body dissatisfaction (Table 1) and body shame (Table 2) were calculated for all participants. The ANOVA results showed statistically significant differences in total scores on both scales between North American and South Korean students ($p < 0.001$).

South Korean students had higher mean scores for body dissatisfaction (M = 3.54, SD = 0.78) and body shame (M = 3.32, SD = 0.85) compared to American students (M = 3.13, SD = 0.65 and M = 2.80, SD = 0.73, respectively).

Table 1

Body Dissatisfaction

Variables	Korean (n = 198)		American (n = 192)	
	M	*SD*	*M*	*SD*
StomachBig	3.47	1.04	3.41	1.26
ThighsLarge	3.75	1.02	3.47	1.33
Stomachright	3.37	.97	3.54	1.18
SatisfiedBS	3.86	.94	3.09	1.19
LikeButtocks	3.70	1.05	2.80	1.20
HipsBig	3.33	1.03	2.78	1.26

Thighsright	3.60	1.02	3.69	1.11
ButtocksLarge	3.28	1.02	2.23	1.23
HipsRight	3.45	.94	3.17	1.15
Total score	31.86*	6.23	28.21	7.34

* Denotes statistically different from North American Sample at p<0.001

Further insights can be gained by examining individual questionnaire items. Two specific variables of importance in this study were satisfaction with body size (SatisfiedBS) and liking the appearance of one's buttocks (LikeButtocks). South Korean students reported higher levels of satisfaction than American students in both body size (3.87 > 3.09, respectively) and liking the appearance of one's buttocks (3.70 > 2.80, respectively).

Table 2

Body Shame

Variables	Korean (*n* = 198)		American (*n* = 192)	
	M	*SD*	*M*	*SD*
NConWrong	3.39	1.040	2.88	1.29
AshamedNB	3.31	1.03	3.06	1.32
BadNLookG	2.83	1.06	2.50	1.32
AshamW	3.27	1.13	2.75	1.48
NConOK	3.70	.94	2.59	1.18
NWorryEx	3.81	.92	3.10	1.22
NExQuestion	3.01	.95	2.40	1.19
AshamNSize	3.18	1.00	3.09	1.32
Total score	26.54*	4.89	22.40	7.08

* Denotes statistically different from North American Sample at p<0.001

When comparing body dissatisfaction variables, students from both countries rated ButtocksLarge ("I think my buttocks are too large") as the statement with which they agreed the least. American students indicated ThighsRight ("I think my thighs are just the right size") as the statement

with which they agreed the most, while South Korean students indicated SatisfiedBS ("I feel satisfied with the shape of my body") as the statement with which they agreed the most. Among body shame variables for both groups, participants identified NWorryE ("I never worry that something is wrong with me when I am not exercising as much as I should") as the statement with which they agreed the most. American students rated NExQuestion ("When I'm not exercising enough, I question whether I am a good enough person") as the statement with which they agreed the least, while South Korean students rated BadNLookG ("I feel like I must be a bad person when I don't look as good as I could") as the statement with which they agreed the least.

Physical activity level, including frequency and duration of physical activity, was not found to be related to body dissatisfaction and body shame in either population. However, cultural differences were observed in the levels of physical activity between South Korean and American students (Table 3). On average, American students spent more time participating in vigorous, moderate, and low-level recreational physical activities compared to South Korean students. South Korean students engaged in more sitting time on weekends, whereas during normal weekdays, American students engaged in more sitting time than their South Korean counterparts.

Correlational analysis was also conducted to examine the relationship between body dissatisfaction and body shame variables for both American and South Korean samples. Significant correlations were found in several variables between the American and South Korean populations (e.g., between StomachBig and StomachRight). Additionally, significant factor correlations were detected between several independent factors and body shame for both American (e.g., between NExQuestion and AshamedNSize) and South Korean (e.g., between AshamedNB and BadNLookG) participants. Detailed data is illustrated in Table 6 (American data) and Table 7 (South Korean data).

Table 3

Physical Activity Level

Variables	Korean (*n* = 198)		American (*n* = 192)	
	M	*SD*	*M*	*SD*
Transportation days	4.56	2.31	4.13	2.68
Transportation time	118.83	93.60	42.28	59.48
Total Recreation MET	996.94	1717.29	1987.07	3162.91
Vig	407.87	969.58	1005.93	1921.94
Mod	272.48	560.39	423.53	1796.76
Walk	316.58	606.80	557.60	1147.81
Sitting time (Weekday)	6.08	3.30	7.26	5.09
Sitting time (Weekend)	12.92	10.99	6.77	3.85

Table 4

Correlations

Body Dissatisfaction (America)									
	1	2	3	4	5	6	7	8	9
1. StomachBig	1.0								
2.ThighsLarge	.592**	1.0							
3.Stomachright	.639**	.372**	1.0						
4.SatisfiedBS	.587**	.417**	.608**	1.0					
5.LikeButtocks	.276**	.158*	.252**	.440**	1.0				
6.HipsBig	.268**	.423**	.213**	.327**	.093	1.0			
7.Thighsright	.385**	.620**	.424**	.490**	.271**	.457**	1.0		
8.ButtocksLarge	.160*	.276**	.113	.219**	.214**	.482**	.261**	1.0	
9.HipsRight	.410**	.385**	.446**	.532**	.399**	.587**	.587**	.353**	1.0

Table 5

Correlations

	Body Dissatisfaction (Korea)								
	1	2	3	4	5	6	7	8	9
1. StomachBig	1.0								
2.ThighsLarge	.486**	1.0							
3.Stomachright	.655**	.384**	1.0						
4.SatisfiedBS	.423**	.588**	.377**	1.0					
5.LikeButtocks	.241**	.429**	.120	.591**	1.0				
6.HipsBig	.192**	.460**	.083	.315**	.312**	1.0			
7.Thighsright	.325**	.634**	.303**	.524**	.390**	.339**	1.0		
8.ButtocksLarge	.290**	.480**	.161*	.411**	.379**	.644**	.482**	1.0	
9.HipsRight	.267**	.507**	.242**	.488**	.555**	.477**	.572**	.503**	1.0

Table 6

Correlations

	Body Shame (America)							
	1	2	3	4	5	6	7	8
1.NConWrong	1.0							
2.AshamedNB	.441**	1.0						
3.BadNLookG	.430**	.556**	1.0					
4.AshamW	.439**	.330**	.266**	1.0				
5.NConOK	.385**	.329*	.453**	.293**	1.0			
6.NWorryEx	.345**	.213**	.250**	.228**	.427**	1.0		
7.NExQuestion	.376**	.316**	.561**	.437**	.422**	.361**	1.0	
8.AshamNSize	.412**	.466**	.430**	.546**	.374**	.298**	.567**	1.0

Table 7

Correlations

	Body Shame (Korea)							
	1	2	3	4	5	6	7	8
1.NConWrong	1.0							
2.AshamedNB	.508**	1.0						
3.BadNLookG	.373**	.590**	1.0					
4.AshamW	.350**	.427**	.213**	1.0				
5.NConOK	.412**	.367*	.389**	.254**	1.0			
6.NWorryEx	.261**	.229**	.164*	.097	.468**	1.0		
7.NExQuestion	.104	.007	.062	-.012	-.008	.129	1.0	
8.AshamNSize	.340**	.477**	.236**	.417**	.313**	.119	.199**	1.0

Multiple regression analysis was performed to assess the impact of body dissatisfaction and body shame levels on the frequency and duration of physical activities. The overall results of the three regression analyses indicated that body dissatisfaction and body shame levels did not have a significant impact on the frequency or amount of time spent on physical activities. In contrast, BMI was found to be significantly related to body dissatisfaction among both samples but was not significantly related to body shame levels. No significant cross-cultural differences were observed between the two samples. The independent variables explained a total of 20-24% of the variance in each analysis for the South Korean and American samples, respectively. See Table 8 for the overall values.

Table 8

Multiple Regression Analyses

		Korea (*n* = 198)			America (*n* = 198)		
DV	IV	*Standardized β*	*t*	*p*	*Standardized β*	*t*	*p*
BMI	*Body Dissatisfaction*	.456	6.638	.00*	.446	6.086	.00*
	Body Shame	-.041	-.597	.551	.084	1.148	.253

Note. R squares = .243 (toward American) and .196 (toward Korean).

4. DISCUSSION

This study aimed to investigate the interplay of physical activity levels, self-perception of weight, and body satisfaction among female college students. To that end, we focused on unraveling the cultural dimensions inherent to these constructs. Consequently, the current investigation extended beyond the confines of a single demographic. Specifically, the present study corresponded to a cross-cultural exploration and comparison of experiences within two distinct college student populations: one originating from the United States and the other from South Korea. This comprehensive examination not only shed light on the multifaceted dynamics of body image and physical activity but also discerned the differences and commonalities that underpin these phenomena across cultural contexts. Further investigated in the study was the realm of body weight, probing its nexus with preferred types of physical activity within these populations. Thus, the

research questions that guided this inquiry referred to the intricate interrelationships among physical activity levels, self-perceived weight, and body satisfaction, while scrutinizing the influence of culture on these dynamics.

Present results did not reveal significant differences between the level of physical activity and body image satisfaction. Nonetheless, findings from this study may hold relevance for practitioners in a number of fields including exercise science, physical education, and sport and exercise psychology. Specifically, the present results indicated a negative correlation between the level of activity and satisfaction with specific body areas, indicating that higher levels of activity were associated with lower satisfaction with different parts of the body. South Korean students expressed higher satisfaction with their body size compared to American students, despite Americans reporting higher levels of leisure-time activity across all intensity levels (vigorous, moderate, and walking). It is worth noting that the physical activity habits of the surveyed South Korean students align with recent national surveys indicating a decline in physical activity participation among Koreans (So & In, 2015). This suggests that South Korean students may engage in less physical activity because they are more satisfied with their bodies. On the other hand, American students may participate in more physical activity because they are less satisfied with their bodies. Further research is warranted to shed light on these explanations. In the present study, the analysis did not yield significant differences between physical activity levels and body image satisfaction. However, multiple studies have supported the relationship between physical activity levels and body image satisfaction (Gualdi-Russo, Rinaldo, & Zaccagni, 2022). Kruger (2002) reported that physical activity level was related to body image satisfaction and body status, and individuals who were active reported higher satisfaction with their body size than inactive individuals. Additional research has also indicated that participation in physical activity facilitated improved body image satisfaction among middle-aged women (Ha, 2005; Hausenblas & Fallon, 2006). The discrepancy between the current results and the previous one could be due to differences in participants' ages. Previous studies included middle-aged participants in addition to younger participants, while the current study included college students 18-30 years of age. Additional work is needed to clarify the relationship between body satisfaction and physical activity for women of all ages.

With regards to comparing physical activity levels and body satisfaction, despite having a lower average weight compared to American students, in the current study, South Korean students exhibited lower body satisfaction levels. This interesting finding may be tentatively explained by research indicating that Asian women, including South Koreans, generally tend to have lower body mass index (BMI) values compared to their Western

counterparts. In a study by Yates, Edman, and Aruguete (2004), western caucasian women had a mean BMI of 23.34, while Asian women had a mean BMI of 19.35 (Chinese) and 20.89 (Japanese). These results also were supported by previous research (Hall, 1995; Oh, 2004; Song & Kwon, 2012; Wardle, Haase, & Steptoe, 2006). The cultural ideals and beauty standards prevalent in South Korea may contribute to the emphasis on a thin body ideal, which could potentially heighten body dissatisfaction among South Korean students despite their lower BMI. These findings further underscore the influence of sociocultural factors in shaping body image perception. They also suggest that body satisfaction is not solely determined by objective weight or BMI (Unilever, 2015). Another explanation for the current study's results is that Asian cultures tend to value a more collectivistic perspective than the individualistic perspective emphasized in Western cultures. Individuals who live in collectivistic cultures (e.g., South Korea) have been shown to place less value on self-confidence than those from Western individualistic societies. Understanding these factors can inform the development of interventions and strategies aimed at promoting positive body image and well-being in diverse cultural contexts (Karazsia, Murnen, & Tylka, 2017).

While it is true that there are differences in average BMI between Asian and Western populations, it is also crucial to consider the complex interplay of factors that influence body satisfaction (Kruger, Lee, Ainsworth, & Macera, 2006). Body image perception is impacted by a number of factors such as cultural ideals, media representation, societal pressures, personal experiences, and individual differences (Hausenblas & Fallon, 2006). In South Korea, there may be cultural factors and societal beauty standards that contribute to body dissatisfaction among college students. These cultural differences could help further explain South Korean women's lower body satisfaction (Song, & Kwon, 2012). Additionally, research has indicated that Asian female students, in general, were more concerned about their weight than American and British female students (Wardle, Haase, & Steptoe, 2006). Additionally, Korean women, specifically, were shown to be more concerned about their body weight when compared to women of other Asian countries (Oh, 2004). These findings could make further sense within the context of a sociocultural environment that fosters a higher degree of self-perceived pressure to conform to thinness ideals among Asian and Asian-American women, in comparison to American women (Hall, 1995). South Korean society places considerable emphasis on physical appearance, and there may be a particular idealized body type or beauty standards that the current students may have felt pressured to conform to. This can in turn lead to negative body image and lower satisfaction, regardless of actual weight or BMI.

In summary, while there may be a correlation between average BMI and body satisfaction, it is crucial to consider the broader cultural, societal, and individual factors that shape body image perception while interpreting these results. Simply comparing average weight or BMI across different populations may not adequately explain differences in body satisfaction.

Previous research has highlighted the prevalence of body dissatisfaction and the pursuit of thinness in these populations, reflecting the complex interplay between sociocultural factors and body image concerns (Karazsia, Murnen, & Tylka, 2017). Therefore, the present results provide further evidence of the impact of sociocultural factors on body image perceptions and underscore the need for culturally sensitive interventions and support systems aimed at promoting positive body image and psychological well-being in Asian and Asian-American women.

Although in the present study, physical activity levels were not related to body satisfaction, there were cultural differences between South Korean and American students. The American female students were more physically active and reported higher overall body satisfaction than the South Korean students, even though they also averaged a higher BMI than their South Korean counterparts. In order to help explain these findings, we consider cultural differences between the two populations studied, such as collectivism versus individualism, recognition of weight status (obese versus overweight), and environmental factors impacting physical activity engagement. The relationship between physical activity participation and body image satisfaction may also foster psychological concerns, including eating disorders, depression, and low self-esteem (Yates, Edman, & Aruguete, 2004). Future research ought to explore the potential influence of these variables on psychological outcomes among the college-age population.

As previously discussed, the influence of media and popular culture on body satisfaction among young women cannot be overlooked. In recent years, there has been a shift in advertising and mainstream media towards promoting natural beauty and encouraging more positive self-perceptions. Notably, Dove® initiated its "Campaign for Real Beauty" in 2004, aiming to widen the definition of beauty and foster confidence instead of anxiety (Unilever, 2015). This campaign, titled "Real Beauty," focuses on promoting body image satisfaction for women of all sizes. Initiatives like Dove®'s campaign are playing a crucial role in helping women develop healthier self-perceptions of weight status and body satisfaction. By continuing international campaigns that promote body image acceptance, companies like Dove® have the potential to contribute significantly to the well-being of young women. Further research exploring the impact of media on women's

body image, specifically investigating young women's self-perception of weight status and body satisfaction, can prove valuable.

It is important to note that the present study's findings require careful contextualization within the distinctive milieu and experiences of college-aged females, the primary cohort under investigation herein. College life constitutes a pivotal phase typified by profound lifestyle adjustments and transformative life events, wielding considerable influence over the development of body image perceptions, body satisfaction, and involvement in physical activity among young women. While this study predominantly recruited participants from academic institutions, it is imperative to acknowledge the broader sociocultural backdrop enveloping these individuals. This encompasses potential impacts stemming from interactions with non-college attending peers, conformity to societal norms, and the influence of cultural expectations, all of which contribute to shaping attitudes towards body image and behaviors pertaining to physical activity.

Noteworthy is the inherent limitation of this study. This study tethered to the exclusive focus on college students, thereby encompassing a specific subset within the cohort of individuals of the same age. By engaging in a comprehensive discourse surrounding the environmental and cultural determinants associated with college environments and college-aged females, a more extensive comprehension of the present studies' findings could be provided. Such comprehensive contextualization could help not only enhance the depth of interpretation surrounding our results but also to accentuate their pertinence within the expansive landscape of young women's lives during their collegiate years. Moving forward, it is our hope that this type of multifaceted contextualization can help foster a more nuanced appreciation of the implications associated with our research. Although, not within the scope of this paper, the latter is important given the potential mental health implications resulting from college-aged females' experiences regarding body image and body image satisfaction.

Additional limitations in the study were as follows. Notably, the sample exclusively comprised participants from two universities, thereby constraining the generalizability of the findings. A more diverse sample from multiple universities and geographic locations would have increased the study's power and potentially yielded more significant results. Second, the survey instruments used in this study may not have provided a comprehensive understanding of participants' perceptions regarding strength training as a form of physical activity and its effects on body image. The category of strength training may not have been interpreted in a consistent manner by all the participants, and it may not have included specific activities such as free weights, CrossFit, and Olympic lifts. Another limitation is the cultural differences between South Korean and American students,

which are influenced by their collectivist and individualist cultures, respectively. These cultural variations could have influenced participants' responses and perceptions related to body image and physical activity. Additionally, the translation of the survey instruments may have introduced interpretation and perception biases due to cultural and linguistic differences in participants' native languages. Future research should consider expanding the sample size by including participants from multiple universities in each country to enhance the generalizability of the findings. Moreover, utilizing more comprehensive survey instruments that capture the nuances of participants' perceptions of strength training and its impact on body image would provide a more in-depth understanding of this relationship. Finally, addressing cultural and linguistic differences through rigorous translation procedures would contribute to the validity and reliability of the data collected.

5. CONCLUSIONS

The findings of this study underscore the ongoing issue of body dissatisfaction among female college students in both the United States and South Korea. To address this issue, it is crucial for parents, school administrators, counselors, and other influential parties to recognize the significance of promoting healthy habits and reducing the discrepancies between perceived and ideal body image. By taking progressive action, such as implementing fitness programs tailored specifically for women, these influential figures can increase the likelihood of female students engaging in physical activity and ultimately enhance their body satisfaction during early adulthood. Integrating fitness programs exclusive to women can also help foster in-group cohesion and remove potential social barriers associated with co-ed fitness programs, thereby encouraging greater participation. While progressing towards a more self- and socially-accepting cultural perspective regarding body satisfaction may pose challenges, it is a necessary process for improving individuals' physical and psychological well-being.

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None

6.2 Conflict of Interest (de-identify in blinded manuscript)

The authors declare no conflicts of interest.

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