



Article

Healthy Food Choice and Physical Activity Among Minority College Students: Survey Study

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Abstract: The problem was little awareness of barriers to healthy food choice and physical activity that contributed to obesity among 18-to 25-year-old African/African American and Latino/Hispanic American students at a university in South Florida. The purpose was to identify the barriers. The research question was, what are the perceived barriers to healthy food choice and physical activity among minority college students? Data collection occurred with the Motivators of and Barriers to Health-Smart Behaviors Inventory-Adapted. Surveyed were 114 students. Survey distribution and data analysis occurred with Survey Monkey. Data analysis included frequencies, percentages, and *t*-tests. Most students agreed that in their culture it was not common to eat fruit. They thought healthy foods were not easy to find at

restaurants and liked to eat unhealthy foods when angry or sad. Most students did not like the taste of low-fat foods and sometimes forgot about trying to eat healthily. Students agreed that when someone gave them unhealthy food, they ate the unhealthy foods. Students agreed they would rather watch TV or play video games than do something physically active. They always made excuses for themselves to not exercise. Most students agreed that integrating physical activities into their schedules was hard to do.

Keywords: Health behavior, physical activity, obesity, barriers, minority group students, food choice

Introduction:

Statement of the Problem

Obesity is a pandemic in the United States that affects the younger generation (Angawi & Gaissi, 2021). In the late adolescent stage of life, obesity, stress, depressive mood, and social pressures plague university students (Angawi & Gaissi, 2021; Celebi et al., 2021). Interactions between stress levels and eating predict weight-related outcomes among university students (Wang et al., 2020). University years, the span known as emerging adulthood, is the idiosyncratic developmental phase for young people (Anjali & Sabharwal, 2017). This formative period in the lifecycle typically described those 18 to 25 years of age (Wang et al., 2020).

For young adults venturing off to a university for the first time, the university's experiences might be one of new beginnings and transitions, during which they separated from familiar routines and established their independence (Manchester, 2020). The university years provided exploration of new ideologies and behavior patterns, affording students self-expression and metamorphoses in their individuality (Anjali & Sabharwal, 2017; Hsu & Chiang, 2020). The young adults' parents were no longer nearby to provide guidance or limit their lifestyle choices. The vital transition period was evident by these emerging adults' increasing autonomy in decision making (Hsu & Chiang, 2020). Emerging adults did what they wanted, when they wanted, and with whom they pleased. Their choices included eating and drinking nonalcoholic beverages and alcohol (Hsu & Chiang, 2020). The adaptation period from high school to university frequently results in radical deviations and may be

extremely stressful for young adults (Anjali & Sabharwal, 2017). Stress may add to the chronic effects on a young adult's body, and lack of effective stress management might negatively impact young adults' total wellness (Hsu & Chiang, 2020; Manchester, 2020).

With the minority university student population, the ubiquity of multicultural diversity in the United States is a source of national pride (Celebi et al., 2021). However, minorities repeatedly carry the burden of negative physical health outcomes and systemic differences, resulting in health disparities (Celebi et al., 2021; Rivera et al., 2014). For example, obese minority students often isolated themselves to avoid bullying. Latino/Hispanic American and African/African American students were more inclined than white non-Latino/Hispanic American students to be obese or overweight (Celebi et al., 2021).

Furthermore, cardiovascular disease has been one of the leading causes of death in the United States every year since 1910 (Carpenter et al., 2021). Hypertension that develops during childhood or adolescence increases one's risk of the early inception of cardiovascular disease during adulthood (Carpenter et al., 2021; Cheung et al., 2011). The Centers for Disease Control and Prevention (2021) identified obesity as the primary public health dilemma, stating that 65% of Floridians were outside the healthy weight parameters. Obesity among minorities, especially African/African American and Latino/Hispanic American adolescents, is a national and significant issue (Celebi et al., 2021).

Multicultural factors are fundamental to consider when providing obesity prevention (Cardel et al. 2020; Du Pré, 2017). One primary reason for obesity in minority communities was a lack of nutritional awareness, including the mindfulness that came from reading and understanding food labels that listed all food content. A community that was health literate had a strong scope of social determinants of wellness, stimulating outcomes that were dependent on an individual's total commitment to preventive health care (Cardel et al. 2020; Centers for Disease Control and Prevention, 2020).

Purpose of the Study

The purpose of this study was to explore the perceived barriers to healthy food choices and physical activity among 18-to 25-year-old minority students. This young population was often at a higher risk for health disparities (Cardel et al. 2020; Hsu & Chiang, 2020). The research question that guided data collection and analysis was, “What are the perceived barriers to healthy food choice and physical activity among minority college students?”

Theoretical Framework

The food cognition dissonance theory (FCDT), authored by Festinger (2001), framed this study. The tenets of the FCDT provided guidance on the examination of attitude changes in minority university students. Tenets suggested that optimizing healthy food choices may positively change dietary behaviors by influencing and/or altering food-related attitudes (Carina et al., 2020; Festinger, 2001). Additionally, Carina et al. (2020) contended that the principles of the FCDT may transform lifestyles among university students for physical appearance concerns or health motives. The FCDT was useful in shaping the optimization of attitudes and behaviors toward healthy food choices in studies of obese university students (Carina et al., 2020).

For instance, Stellefson et al. (2006) investigated the effects of cognitive dissonance in university students who intentionally modified lifestyle behaviors. With proper counseling, mentoring, and interventionist Health Science Education programs, urban university students assumed healthier behaviors for physical appearance and health reasons. The investigation achieved success by targeting specific student behavioral patterns. Patterns were as follows: (a) physical fitness (b) food consumption, (c) health and appearance concerns linked to dietary and physical exercise activities, and (d) intentions to implement healthier choices related to students’ health risks or perceptions of health risks (Carina et al., 2020; Stellefson et al., 2006).

Stigmas and Discrimination of Obese Individuals

Weight discrimination is especially frequent among women, young adults, and minorities; obese people are often condemned for their weight challenges (Keramat et al., 2021). The stigmatization of obese people impedes health, accompanies health disparities, and inhibits effective obesity intervention efforts (Moreira et al., 2020). As the average weight of individuals soared in the United States, antifat norms and weight-related stigmas escalated (Moreira et al., 2020). These stigmas were due to the high cultural value placed on individual effort, responsibility, and work, with a slim body seen as reflecting that success (Moreira et al., 2020).

Belief systems support weight-related stigmas (Keramat et al., 2021), creating strong moral connotations between being fat and being lazy, unmotivated, and greedy (Marshall et al., 2020). Experiencing weight-related stigmas (i.e., feeling judged, mistreated, or excluded) discourages effective weight loss behavioral patterns (Marshall et al., 2020). A weight stigma shaped less healthy eating behaviors, hidden during poor eating choices (i.e., “the damage is already done,” Brewis et al., 2016, p. 578). Obese students and adults receive blame for their weight, with common perceptions that weight stigmatization was justifiable and may motivate individuals to adopt healthier behaviors. To a degree, the stigmatization of obesity impedes total wellness, cultivates health disparities, and obstructs the success of obesity interventions. Negative attitudes toward obese individuals are pervasive in the U.S. society (Brewis et al., 2016; Marshall et al., 2020).

Factors Influencing Healthy Food Choices and Obesity

Multicultural influences are integral to consider when providing obesity prevention due to the ubiquitous nature of health intervention and prevention programs (Centers for Disease Control and Prevention, 2021). Additional factors influencing food insecurity among university students include burgeoning costs for university tuition, expensive room and board, parents who were often unable to afford extra fees, an inability to find adequate work, and lack of qualifications for other benevolence or government-assistance programs (Kim & Kim, 2020).

Santos et al. (2016) observed the obesity-related eating behaviors of 156 Latino/Hispanic American university students, focusing on their health status and elevated risk levels for diabetes due to family history. In this descriptive study, the authors collected data on dietary behaviors from students' university profiles to encompass sociodemographic characteristics. The findings of Santos et al. (2016) showed that approximately 58% (90) of the university cohort in their study were overweight or obese, with female students reporting a heightened risk for diabetes. A major conclusion of Santos et al. (2016) was that Latino/Hispanic American students consumed hefty portions of meat, fried potatoes, bread, and tortillas, contributing to inflated body mass and diabetes risk indices. Other conclusions were that there are demographic characteristics related to being overweight or obese in university settings: being male, single, older, low socioeconomic status, minority, and living off campus. When the cost of nutritional food was not an issue, Latino/Hispanic American and African/African American university students consumed less fruit and vegetables than their Caucasian, multiracial, and other racial-ethnic counterparts (Kim & Kim, 2020; Santos et al. (2016).

Factors Influencing Physical Activity and Obesity

Cawley et al. (2021) conducted a study on absent young employees from various government and private organizations. The study investigated whether health promotion instruction empowered employees to become better stewards of their bodies. A qualitative case study research design guided data collection and analysis. The findings of Cawley et al. showed that the key to young employees' successful lifestyle transformation was moderation with food and constant engagement in physical activities. The conclusion was that adopting a healthy lifestyle throughout emerging adulthood was associated with a lower risk of acquiring cardiovascular diseases during the middle age. Cawley et al. posited that intervention or prevention programs based on moderation with food and constant engagement in physical activities might play a crucial role in transforming the next generation of young employees (Cawley et al.; 2021).

Similarly, in a cross-sectional survey design study by Gabal et al. (2020) with 477 university students, these students responded that mindful eating afforded them the ability to maintain their dietary goals and reach long-term health outcomes. A conclusion of Gabal et al. was that by avoiding overeating and being mindful of hunger cues, students may enjoy meals and snacks more when hunger is present. Another conclusion was that students required guidance from the university community to seek food that was more nutritious and appealing. The university community was an ideal environment for implementing health consciousness and good physical activity practices. Gabal et al. (2020) explained that a guest speaker, former First Lady Michelle Obama, suggested that universities should make a commitment to promoting vegetables, fruits, and whole grains on every part of the cafeteria menu. University cafeteria management might make portion sizes smaller and emphasize quality over quantity (Centers for Disease Control and Prevention, 2021; Gabal et al., 2020).

Materials and Methods

Instrument

The researcher disseminated the Motivators of and Barriers to Health-Smart Behaviors Inventory-Adapted (MBHSBI-A) to 200 university students, and 114 students returned completed surveys. Data for the research question were obtained from (a) Section IV (Healthy Foods and Snacks–Barriers) and (b) Section VI (Physical Activity–Barriers) of the MBHSBI-A. The MBHSBI-A evolved from the original MBHSBI developed by Tucker et al. (2012). All items on the adapted instrument were taken from the original instrument. Tucker et al. (2012) indicated that after confirming the content validity and conducting preliminary pilot testing, they administered the instrument to a national sample of 926 culturally diverse young adults. Factor analyses and internal consistency results supported multiple scales and subscales that measured motivators and barriers to each of the targeted health-smart behavior domains. Scores correlated with the expected directions of health self-efficacy and important health-related behavioral goals. The calculated reliability

coefficient, Cronbach's alpha ($\alpha = .84$), measured the internal consistency reliability of the MBHSBI (Tucker et al., 2012).

Seven reviewers critiqued and evaluated the MBHSBI-A items to facilitate validity and reliability for the 114 university African/African American and Latino/Hispanic American students. The reviewers included two university professors, two African/African American senior university students, two Latino/Hispanic American university junior students, and one school district statistician. The seven reviewers completed and reviewed the MBHSBI-A for clarity, relevance, and ambiguous language. This researcher incorporated pertinent feedback from the critique and evaluation of the MBHSBI-A items that improved the validity and reliability of the instrument (Arndt et al., 2021; Rovetta, 2020).

Procedures

This researcher emailed 200 university students, indicating that they may receive an important survey (MBHSBI-A), which was vital to the research project. There were 200 university students identified by the data clerk through quota sampling. Kang (2021) described quota sampling as a nonprobability sampling method that relied on nonrandom selection of a predetermined number of participants for proportional units. The proportional selection of 200 students came from three subgroups (strata): gender, ethnicity, and university classification (Kang, 2021).

A copy of the MBHSBI-A emailed to the 200 identified students contained a letter of participation. The email and participation letter included a Survey Monkey link, and 114(57%) of the students completed and returned the survey. The directions in the letter of participation informed students to read the instructions and complete and return the MBHSBI-A if they desired to participate in the study. By completing and returning the anonymous MBHSBI-A, the students provided their informed consent to participate in the study. In addition, students' directions tasked them to (a) complete all items on the survey, (b) respond honestly to all items, and (c) return the survey within seven days.

Students who did not consent to participate in the study might merely not complete and return the survey. After the 7-day period, a follow-up email was sent to all participants as a reminder to those who had not returned the survey. Confidentiality of data occurred by asking respondents to print no names or university-identifying information on the MBHSBI-A. Additionally, all MBHSBI-A data existed on a password-protected flash device, which was stored in a locked file cabinet in this researcher's office until the time for data analysis.

Results

Participants

At the time of the study, the university had approximately 48,622 enrolled students; 36% were Latino/Hispanic American, and 31% were of African/African American or African descent (Black). Participation in the study was voluntary, and all responses were anonymous. A breakdown of the specific demographics is shown in Table 1. More than half of the students were female (57.9%) and Latino/Hispanic American (63.2%). Most students were in the age range of 18 to 21 years of age (76.3%).

Table 1

Demographics of Participants (n=114)

Demographic	No.	%
Gender		
Male	48	42.1
Female	66	57.9
Ethnicity		
African/African American	42	36.8
Latino/Hispanic American	72	63.2
Age		
18 to 21	87	76.3
22 to 25	27	23.7

Findings

The research question was, “Are there perceived barriers to healthy food choice and physical activity among minority college students?” An examination of the data in Table 2 shows that for the physical activity motivator scale, the mean score ($M = 4.16$) for Latino/Hispanic American students was greater than the mean score ($M = 4.08$) for African/African American students. The mean difference ($MD = .08$) had no statistical significance. $t(11) = -.78, p = 0.81$. For the physical barrier scale, the mean score ($M = 2.59$) for African/African American students was greater than the mean score ($M = 2.51$) for the Latino/Hispanic American students. The mean difference ($MD = .08$) had no statistical significance. $t(11) = .51, p = 0.67$. On the food motivator scale, the mean score ($M = 3.90$) for Latino/Hispanic American students was greater than the mean score ($M = 3.83$) for African/African American students. The mean difference ($MD = .07$) had no statistical significance.

$t(11) = -.71, p = 0.99$. Regarding the food barrier scale, the mean score ($M=2.83$) for African/African American students was greater than the mean score ($M = 2.81$) for Latino/Hispanic American students. The mean difference ($MD = .02$) had no statistical significance. $t(11) = .51, p = 0.48$ (Table 2). These findings suggested that the two groups did not differ significantly on any of the four scales.

Table 2

Results of Test for Significance by Ethnicity Among Physical Activity and Food Choice

Item	Mean	SD	F	t	df	p
Physical activity motivator scale						
African American	4.08	.56				
Hispanic American	4.16	.54	.06	-.78	11	.81
Physical activity barrier scale						
African American	2.59	.75				
Hispanic American	2.51	.80	.19	.51	11	.67
Food motivator scale						
African American	3.83	.48				
Hispanic American	3.90	.53	.00	-.71	11	.99
Food barrier scale						
African American	2.83	.51				
Hispanic American	2.81	.63	.51	.15	11	.48

Perceived Barriers to Food Choice

Students responded to 15 items on the MBHSBI-A of healthy food choice barriers, with answers ranging from strong agreement to strong disagreement. The following paragraphs provide the results

of the respondents' responses to the 15 items. The calculation of responses occurred for each item by combining the strongly agree and agree responses together to show agreement and combining the strongly disagree and disagree responses together to show disagreement (Creswell & Creswell, 2019; Mills & Gay, 2019) (Table 3).

In response to Item 1 (No one ever taught me how to eat healthy), 78 students (68.4%) disagreed, 15 students (13.2%) neither agreed nor disagreed, and 21 students (18.4%) agreed. For Item 2 (In my culture or family, it is not common to eat fruits), 22 students (19.4%) disagreed, 10 students (8.8%) neither agreed nor disagreed, and 82 (71.9%) agreed. In response to Item 3 (There are no healthy foods, or fruits and vegetables, at my home), 82 students (71.9%) disagreed, 11 students (9.6%) neither agreed nor disagreed, and 21 students (18.4%) agreed (Table 3).

Table 3

Participant Responses to the 15 Items on Food Choice

Item	SD/D	N	A/SA
1. No one ever taught me how to eat healthy.	78	15	21
2. In my culture or family, it is not common to eat fruits.	22	10	82
3. There are no healthy foods or fruits and vegetables at my home.	82	11	21
4. My family members do not like eating fruits and vegetables every day.	17	10	87
5. I do not understand why eating fruits and vegetables can help me have a healthy weight.	98	5	11
6. It is hard to find healthy foods that I can easily take with me.	22	13	79
7. Healthy foods are not easy to find at restaurants.	32	24	58
8. I like to eat unhealthy foods when I feel stressed.	66	12	36
9. Vegetables do not look good to eat.	61	20	33
10. I get bored of eating the same vegetables over and over.	69	26	19
11. I like to eat unhealthy foods when I am angry or sad.	32	6	74
12. I do not like the taste of low-fat foods.	14	9	90
13. Healthy foods and snacks cost more than unhealthy foods and snacks.	100	6	7
14. Sometimes I just forget about trying to eat healthy.	29	14	71
15. When someone cooks or gives me unhealthy food, I eat it.	10	19	85

Note. SD = Strongly disagree; D = Disagree; N = Neither agree nor disagree; A = Agree; SA = Strongly agree.

In response to Item 4 (My family members do not like eating fruits and vegetables every day), 17 students (14.9%) disagreed, 10 students (8.8%) neither agreed nor disagreed, and 87 students (76.3%) agreed. For Item 5 (I do not understand why eating fruits and vegetables can help me have a healthy weight), 98 students (86.0%) disagreed, five students (4.4%) neither agreed nor disagreed, and 11 students (7.6%) agreed. In response to Item 6 (It is hard to find healthy foods that I can easily

take with me), 22 students (19.3%) disagreed, 13 students (11.4%) neither agreed nor disagreed, and 79 students (69.3%) agreed. For Item 7 (Healthy foods are not easy to find at restaurants), 32 students (28.1%) disagreed, 24 students (21.1%) neither agreed nor disagreed, and 58 students (50.9%) agreed. In response to Item 8 (I like to eat unhealthy foods when I feel stressed), 66 students (57.9%) disagreed, 12 students (10.5%) neither agreed nor disagreed, and 36 students (31.6%) agreed. For Item 9 (Vegetables do not look good to eat), 61 students (53.5%) disagreed, 20 students (17.5%) neither agreed nor disagreed, and 33 students (28.9%) agreed.

In response to Item 10 (I get bored of eating the same vegetables over and over), 69 students (60.5%) disagreed, 26 students (22.8%) neither agreed nor disagreed, and 19 students (16.7%) agreed. For Item 11 (I like to eat unhealthy foods when I am angry or sad), 32 students (28.1%) disagreed, 6 students (5.3%) neither agreed nor disagreed, and 74 students (64.9%) agreed. Two students did not respond to Item 11. In response to Item 12 (I do not like the taste of low-fat foods), 14 students (12.3%) disagreed, 9 students (7.9%) neither agreed nor disagreed, and 90 students (79.0%) agreed. One student did not respond to Item 12.

For Item 13 (Healthy foods and snacks cost more than unhealthy foods and snacks), 100 students (87.7%) disagreed, 6 students (5.3%) neither agreed nor disagreed, and 7 students (6.2%) agreed. One student did not respond to Item 13. In response to Item 14 (Sometimes I just forget about trying to eat healthy), 29 students (15.4%) disagreed, 14 students (12.3%) neither agreed nor disagreed, and 71 students (62.3%) agreed. For Item 15 (When someone cooks or gives me unhealthy food, I eat it), 10 students (8.8%) disagreed, 19 students (16.7%) neither agreed nor disagreed, and 85 students (74.6%) agreed (Table 3).

Perceived Barriers to Physical Activity

Students responded to 15 items on the MBHSBI-A of physical activity barriers, with answers ranging from strong agreement to strong disagreement. The following paragraphs provide the results of the

respondents' responses to the 15 items. The calculation of responses for each item occurred by combining the strongly agree and agree responses together to show agreement and combining the strongly disagree and disagree responses together to show disagreement (Creswell & Creswell, 2019; Mills & Gay, 2019) (Table 4).

In response to Item 1 (I would rather watch TV or play video games than do something active), 24 (21.1%) students disagreed, 31 (27.2%) neither agreed nor disagreed, and 59 students (51.8%) agreed. For Item 2 (I would rather watch TV than be active because it is easier), 71 students (62.2%) disagreed, 24 students (21.1%) neither agreed nor disagreed, and 19 students (16.7%) agreed. In response to Item 3 (I feel lazy and watching TV is the only thing I want to do), 76 students (66.7%) disagreed, 15 students (13.2%) neither agreed nor disagreed, and 22 students (19.3%) agreed. One student did not respond to Item III.

For Item 4 (Watching TV is a part of my routine and being active is not),

Twenty students (17.5%) disagreed, 14 (12.3%) neither agreed nor disagreed, and

Eighty students (70.2%) agreed. In response to Item 5 (I have a tough time making myself turn off the TV to do something active), 21 students (18.5%) disagreed, 20 students (17.5%) neither agreed nor disagreed, and 73 students (64.0%) agreed. For Item 6 (TV, movies, or video games let me take my mind off other things better than exercising does), 50 students (43.8%) disagreed, 29 students (25.4%) neither agreed nor disagreed, and 34 students (29.8%) agreed. One student did not respond to item 6 (Table 4).

Table 4

Participant Responses to the 15 Items on Physical Activity

Item	SD/D	N	A/SA
1. I would rather watch TV or play video games than do physical exercise.	24	31	59
2. I would rather watch TV than be active because it is easier.	71	24	19
3. I feel lazy and watching TV is the only thing I want to do.	76	15	22
4. Watching TV is a part of my regular routine and being active is not.	20	14	80
5. I have a tough time turning off the TV to do something active.	21	20	73
6. TV, movies, or video games let me take my mind off other things better than exercising does.	50	29	34
7. I am always making excuses for myself not to exercise.	35	22	57
8. I forget about being physically active.	19	24	71
9. I am too lazy to exercise.	72	17	25
10. Integrating physical activities into my schedule is hard to do.	42	13	59
11. I do not like to exercise.	84	15	15
12. I have too many other things to do that are more important than exercising.	62	27	25
13. I do not have time to exercise.	25	22	66
14. I feel embarrassed when I exercise around other people.	74	10	30
15. I do not like how I look when I am exercising.	73	22	18

Note. SD = Strongly disagree; D = Disagree; N = Neither agree nor disagree; A = Agree; SA = Strongly agree.

In response to Item 7 (I am always making excuses for myself to not exercise), 35 students (30.7%) disagreed, 22 students (19.3%) neither agreed nor disagreed, and 57 students (50.0%) agreed. For

Item 8 (I forget about being active), 19 students (16.7%) disagreed, 24 students (21.1%) neither agreed nor disagreed, and 71 students (62.3%) agreed. In response to Item 9 (I am too lazy to exercise), 72 students (63.2%) disagreed, 17 (14.9%) neither agreed nor disagreed, and 25 students (21.9%) agreed (Table 4).

For Item 10 (Integrating physical activities into my schedule is hard to do), 42 students (36.9%) disagreed, 13 students (11.4%) neither agreed nor disagreed, and 59 students (51.7%) agreed. In response to Item 11 (I do not like to exercise), 84 students (73.6%) disagreed, 15 students (13.2%) neither agreed nor disagreed, and 15 students (13.2%) agreed. For Item 12 (I have too many other things to do that are more important than exercising), 62 students (54.3%) disagreed, 27 students (23.7%) neither agreed nor disagreed, and 25 students (22.0%) agreed.

In response to Item 13 (I do not have time to exercise), 25 students (21.9%) disagreed, 22 students (19.3%) neither agreed nor disagreed, and 66 students (57.9%) agreed. One student did not respond to this question. For Item 14 (I feel embarrassed when I exercise around other people), 74 students (64.9%) disagreed, 10 students (8.8%) neither agreed nor disagreed, and 30 students (26.3%) agreed. In response to Item 15 (I do not like how I look when I am exercising), 73 students (64.0%) disagreed, 22 students (19.3%) neither agreed nor disagreed, and 18 students (15.8%) agreed. One student did not respond to Item 15 (Table 4).

Answering the Research Question

Findings for the research question indicated that the African/African American and Latino/Hispanic American students agreed that there were barriers to healthy food choices when this researcher focused on how half or greater than half of the students responded to an item on the response options of agreed and strongly agreed. Combining the response options of agreed and strongly agreed, most students (82) agreed that in their culture or family, it was not common to eat fruits. Most students (87) agreed that their family members did not like eating fruits and vegetables every day; they (79)

responded that it was hard to find healthy foods to take with them. In addition, most students (58) agreed that healthy foods were not easy to find at restaurants, and they (74) concurred with liking to eat unhealthy foods when angry or sad. Most students (90) reported not liking the taste of low-fat foods; they (71) sometimes simply forgot to try to eat healthy. Furthermore, students (85) agreed that when someone cooked or gave them unhealthy food, they ate the unhealthy foods.

In support of the findings of the present study, Bailey et al. (2020) reported that the families of African/African American and Latino/Hispanic American university students influenced individuals' food choices and risk of obesity in varied ways. Food consumed by these families at home and how family members shared meals influenced their grocery selections and portion sizes. Similarly, Bihuniak et al. (2020) reported that the food environment is toxic because it corrupts healthy lifestyles and promotes obesity. Healthy foods were more expensive than junk food for African/African American and Latino/Hispanic American families. Disparities in habits included fast food consumption, as African/African American and Latino/Hispanic American university students consumed higher amounts of calories through fast foods and soda that were high in sugar, fat, and calories (Cardel et al., 2020). In the United States, eating healthy costs more than eating junk food. However, cultivating healthy eating is a critical strategy for promoting health and reducing the risk of obesity, depressed moods, or other chronic diseases. Health literacy among African/African American and Latino/Hispanic American university students is obscure; however, college campuses offer an unprecedented opportunity to promote health literacy.

Additional findings for the study's research question indicated that African/African American and Latino/Hispanic American students perceived barriers to physical activity. Most students (59) agreed that they would rather watch TV or play video games than do something physically active, and they (80) agreed that watching TV was a part of their routine and being physically active was not. Most students (73) concurred that they had a tough time turning off the television to do something physically active, while they (57) responded that they always made excuses for themselves to not

exercise. Most students (71) agreed that they forget to be physically active, and these students (59) responded that integrating physical activities into their schedules was difficult. Students (66) agreed that they did not have time to exercise.

Confirming the findings of the present study, Brailovskaia et al. (2022) categorized approximately one-third of university students as overweight or obese, and elevated weight correlated with an increased risk of depressive symptoms and little focus on physical exercises. Lack of energy and fatigue were common symptoms that prevented participants from engaging in meaningful activities, such as physical exercise or socializing. According to Brailovskaia et al., major depressive mood disorders may have symptoms that last for at least several weeks; these symptoms include overeating, weight gain, irritability, frequently undesirable moods, lack of energy, and fatigue.

Implications and Recommendations

Multicultural wellness education should include cardiovascular disease risk factors and their association with the comorbidities of obesity and depression. Emerging adults may benefit from restructuring their diets, improving lifestyle habits, and engaging in regular physical exercise.

Obesity interferes with the ability of the next generation to lead completely healthy lives (Chopra et al., 2021). African/African American and Latino/Hispanic American students might receive more guidance to facilitate their self-help on how to take control of healthy food choices and engage in meaningful physical exercise routines. The focus of the guidance may be to ignite a system of accountability related to obesity, hypertension, diabetes, and cholesterol prevention. Furthermore, this empowerment will infuse lifestyle changes that will result in positive health outcomes (Guddal et al., 2020).

Additionally, university professors, administrators, and health educators can ask how and where the students buy their grocery items and how they include those foods on their plates. Health educators may explain that fast food is not a healthy option using educational materials representative of

students' ethnicity. The Centers for Disease Control (2021) disseminated a new initiative entitled Active People, Healthy Nation to make it easier for university students to be physically active wherever they live, learn, work, and play. The Best Colleges Organization (2019) advocated daily physical activity to help keep students' thinking, learning, and judgment skills sharp during the aging process.

University community-wide campaigns and university wellness group programs might be more visible, sustainable, and reach large numbers of minority students on campus (Begum & Tettey, 2020). Wellness interventions can combine physical activity messaging with community activities that focus on overall wellness. Positive messages can be delivered via multiple channels, including social media, text messaging, online, billboards, and written materials. These positive messages might include efforts that focus on university students, such as counseling and support groups, or on the university community environment in areas such as developing and promoting biking, walking trails, or free and exciting group exercises (e.g., Zumba or hip-hop) (Begum & Tettey, 2020).

Conclusions

Health literacy plays a vital role in identifying uncontrollable and controllable risk factors associated with depression and cardiovascular diseases, fruit and vegetable consumption, and exercise among minority university students. Future research may explore the relationship between health literacy and dietary practice decision making and apprise interventions to minority university students, as well as advancements in how to create and individualize weight management programs geared toward minority emerging adults. The Centers for Disease Control and Prevention (2020) suggested educational dialog on reducing body mass index by promoting physical activity, including nutrition instruction, physical activity prescription, and behavioral skills development and training.

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