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# Is the Prevalence of Eating Pathology and Intense Body Dissatisfaction in Communities of Color Comparable to a Nationally Representative Sample of United States Adults?

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# **Abstract**

Background: Communities of color have been underassessed and under-diagnosed with eating disorders. Most of the previous research on BIPOC communities has focused mainly on eating pathology as it relates to food insecurity. The purpose of this study was to explore whether the prevalence of eating pathology and intense body dissatisfaction in communities of color was comparable to a nationally representative sample. The data outcomes may be relevant to community based mental health clinics and their partners as it will potentially highlight gaps in research, diagnostic assessment, and treatment interventions specific to eating disorders in marginalized communities.

Methods: The data was collected from 308 individuals seeking mental health treatment in a community based mental health clinic in East Harlem NYC. Two separate assessments were utilized. The first assessment was conducted at intake within the comprehensive psychosocial assessment. It was a self-reported measure that assessed frequencies of 5 types of eating pathology: 1. Restricting; 2. Restricting/binging; 3. Restricting/purging; 4. Binge/purging and 5. Binging. Body and weight attitude Likert assessment scale, a 14-item measure was created based on 5 subscales: 1. Income; 2. Restricting eating and obsessive thought behavior; 3. Body dissatisfaction; 4. Binge-eating and Compensatory behavior; 5. Emotional distress.

Results: This is the first study to investigate rates of eating pathology and attitudes around body image and weight in a poorer community with most of the community identifying as people of color. We found high rates of body dissatisfaction and a high prevalence of eating pathology which is not only comparable to a nationally representative sample for a white population but is higher than what the current data supports for any racialized group. Our data also shows higher rates of eating disorder diagnosis, particularly for AN, AAN, and EDNOS than what is supported in a national sample for any racialized group we discovered the prevalence of frequency of restricting food was highest in the black and mixed-race participants. Black participants had the highest rate of diagnosis of an eating disorder of restricting type, which is much higher than the national rates. Body dissatisfaction is the most notable risk factor in the development of eating disorders. The mixed-race group (N=97) rated highest on intensity of body dissatisfaction. This study highlights the need for further investigation, so we don't perpetuate the neglect of these communities in both mental and medical health care.

**Keywords:** Eating disorders; Body dissatisfaction; Atypical anorexia; Communities of color; Food insecurity; Eating pathology; Race and weight bias; Restricting disorders

**Abbreviations:** NIMH: National Institute of Mental Health; NEDA: National Eating Disorder Association; ED: Eating Disorder; BED: Binge-Eating Disorder; AAN: Atypical Anorexia Nervosa; AN: Anorexia Nervosa; EDNOS: Eating Disorder Not Otherwise Specified; BIPOC: Black, Indigenous, People of Color.

#### Introduction

#### **Eating disorders**

Eating disorders impact around 9% of the global population and around 30 million people living in the United States [1]. Eating disorders have the highest rate of mortality of any other mental health disorder, with 10,200 deaths annually or one death every 5 minutes [1]. That, by percentages, is a higher number than people who die of opioid overdoses [1]. There are substantial psychiatric comorbidities associated with eating disorders such as depression and increased suicidality [2], with 26% of individuals with eating disorders attempting suicide each year [3]. Medical complications can be very serious, causing long-lasting damage to one's organ system, and even life threatening [4].

Adults are at a much higher risk than previously thought with 0.8% of 20–39-year-olds diagnosed with Anorexia nervosa, 1.5% with Bulimia nervosa and 3.5% with Binge eating disorder, while percentages are comparable for adults 40 to 60+ and for adolescents 10-19 years old [3]. Further, 13% of women over the age of 50 experience eating issues that require interventions by healthcare providers [1], although it's important to note that these numbers do not account for atypical anorexia or other

eating and feeding disorders that have severe clinical implications as well [5]. Even faced with the seriousness of eating disorders, it remains both underdiagnosed and undertreated, with only one-third of individuals struggling with eating disorders ever receiving treatment and only 6% ever receiving a diagnosis from a medical professional [3]. Unfortunately, this leaves many people inappropriately treated or not treated at all for an eating disorder, leaving individuals at risk for lifelong struggles with medical complications and emotional torment [4].

# Food insufficiency and insecurity

Research suggests that food insufficiency and food insecurity increase disordered eating behaviors [6-9]. It is believed that fluctuations in food availability can lead to disordered eating patterns such as restriction when food is scarce and binge eating when food is available [7]. Restricting food consumption, whether involuntary or voluntary, leads to a preoccupation with food [9]. The more severe the food insecurity, the higher the risk for intentional food restriction [7]. According to restraint theory, when one intentionally restricts their intake of food, there is an increased risk of binge eating behavior [10]. Further, unintentional weight loss may be as powerful of a trigger to initiating anorexia as intentional dieting [11].

Although food restriction is still correlated with eating disorder pathology in people with food insecurity, it is argued that individuals struggling with food insecurity rarely reported the reason for restriction was due to poor body image or specific weight concerns but rather restricted food intake to make food last [12]. Other research has found that individuals with severe food insecurity, specifically those who also have children in the home, reported higher rates of weight and body shape dissatisfaction along with high rates of compensatory behaviors such as purging, laxative abuse and obsessive exercising behavior [6]. Body dissatisfaction is the most notable risk factor for the development of an eating disorder [13,14]. It has been argued that as many as 17%-20% of those with food insecurity reported engaging in self-induced purging behavior as a means of controlling weight especially after a self-reported binge-eating episode [6,7].

# Racial bias in the under-assessment of eating disorders

Minority clients are not being assessed thoroughly and accurately, especially for restricting eating pathology. Some argue that people of color are less likely to have an eating disorder or experience symptomology that is synonymous with eating disorders [1]. However, even if identical symptoms are experienced, black people are 50% less likely to get a diagnosis of an eating disorder and have a much less chance of getting diagnosed with anorexia than their white counterparts [3]. Further supporting this claim, research has found that of those who had a diagnosis of and received treatment for restrictive eating disorders were more likely female than male [15]. The perceived need for treatment is more associated with individuals from more affluent backgrounds and of higher socioeconomic status [15].

Earlier studies support this bias [16,17], finding that clinicians were able to recognize disordered eating behaviors when a case scenario was presented across racial groups but were less likely to give a diagnosis of an eating disorder or recommend treatment for a black client. A recent study found that black women use compensatory behaviors such as fasting, laxative use, eating very little, or making themselves purge to control weight more than any other racial group, especially in adulthood [18]. Individuals can feel demoralized and frustrated by racially based stereotypes that mental health clinicians and medical providers have around eating disorders [19]. Research suggests that barriers to treatment are directly related with the racial stereotypes of the clinician with Gordon et al. [16], finding that patients of color are less likely than their white counterparts to be asked by a physician about disordered eating behavior and to be less likely to be referred for further mental health treatment for eating pathology [19].

Eating disorders are not a mental health issue specific to white affluent young women. Trauma and poverty increase the risk of disordered eating. It is more common than not that a majority of clients coming into a community mental health clinic, especially in marginalized communities, suffer from some form of trauma, whether it be inter-personal or childhood trauma, community violence and crime, systematic racism, or all of the above. A significant portion of a community of lower socioeconomic status is supported by food stamps and suffer from food insecurity. However, argued that community clinics are assessing for tobacco and substance use but neglecting to assess for eating disorders or pathological eating patterns [4].

Individuals who struggle with their weight are more likely to be referred to weight loss programs than for treatment of eating disorders [20], or to have weight loss as a primary treatment goal. For someone struggling with an eating disorder, this could have deadly consequences [21]. Individuals with BED express the desire to lose weight as well as the desire to stop the disordered eating behavior, however, most have used only dieting as a form of intervention, and most individuals have never been in mental health treatment for their eating disorder [22].

This highlights a bigger unseen issue around, at minimum, disordered eating patterns that can lead to poor body image, self-loathing, and with a population that isn't thought of to struggle with eating disorders, isolation, and shame. If the research can highlight issues such as disordered eating behavior and eating disorders in these communities, we can start treating individuals with different mental health interventions on a micro level and support social change in health care and how we are assessing and treating individuals and communities on a macro level.

NYC has placed a great deal of focus on obesity in marginalized communities. Further, the identified interventions support diet and exercise as the only means of treatment with no regard to the clinical implications around disordered eating. This has done very little to address the underlying issues that are impacting the community and ultimately are keeping marginalized communities sick. If we can highlight that people in communities of color do in fact struggle with eating disorders

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across the spectrum, we can help shift the idea that eating disorders only impact affluent white women but also impact both men and women in communities of color. On an individual level, we can start to utilize more appropriate mental health treatment interventions to help individuals live fuller and healthier lives.

#### **Materials and Methods**

#### **Purpose**

The purpose of this study was to explore whether the prevalence of eating pathology and intense body dissatisfaction in communities of color was comparable to a nationally representative sample of 36,309 of United States adults [23], which found the lowest rates of AN among non-hispanic black individuals and the lowest rates of AN among individuals with an income level less than \$39,999. The data outcomes may be relevant to community based mental health clinics and its partners as it will potentially highlight gaps in research, diagnostic assessment, and treatment interventions specific to eating disorders in marginalized communities. In the initial assessment of clients' medical records in the community based mental health clinic in East Harlem, there is a significant indication that community members are struggling with eating disorders across the spectrum. Of the 366 individuals admitted to the clinic in the past year, 137 of them reported some form of disordered eating behavior. Most significantly, 45% of those reporting disordered eating patterns, reported restricting food

while another 7% reported purging behavior 1-2 times daily or 1-2 weekly (Data from MEDI-EHR, September 29th, 2022).

intake 1-2 times daily or 1-2 weekly without binging behavior

#### **Participants**

Data utilized for this study was collected from a community mental health clinic in East Harlem, New York. East Harlem is predominately a community of color, with 43.8% of the community identifying as hispanic and 36.6% black. East Harlem ranks as the 3<sup>rd</sup> poorest neighborhood in NYC. The clinical sample was recruited from individuals that were seeking or were already accessing mental health treatment at a communitybased outpatient mental health clinic. The participants were identified for participation through the intake process or through chart review. Seventy one percent of the sample size were female (N=220), 27.1% male (N=84), and 1.3% (N=4) identified as a gender other than male or female. The age range was 17-70. Please see Table 1 for racial demographics. Patients under the age of 18 were not eligible for participation, as were vulnerable populations such as prisoners, cognitively impaired, individuals actively psychotic. If a participant with an eating disorder needed a higher level of care, such as hospitalization or partial hospitalization, they were referred out and excluded from the study, and participants struggling with severe medical ailments were also excluded. Otherwise, males and females between the ages of 18-70 were included in the sample with no other exclusions.

Table 1: Demographics by race and ethnicity.

Black	White	Hispanic	Mixed-Race	Asian
33.30%	13.90%	19.70%	31.40%	1.30%
(N=103)	(N=43)	(N=61)	(N=97)	(N=4)

#### **Procedures**

The procedures were approved by Tulane's Institutional Review Board (IRB). Medical charts were reviewed to obtain the information. Data pulled from the medical record system <sup>©</sup>Medi-HER [24], a behavioral health medical record system was analyzed. The level of frequencies with each variable and grouping each variable by race was conducted in <sup>©</sup>Jamovi (Version 2.2, 2021) [25].

Data was collected from 366 clients. Data could not be used from 58 clients due to either clients being discharged before full assessment was completed (n=48) or clients still being in preadmission stage (n=11). The final number of participants used for the study was 308.

#### **Ethical considerations**

The therapists that administered the assessments were all licensed mental health clinicians and well trained and equipped to manage and support a client through emotional and

psychological distress. The information gathered was kept in the participants electronic medical record, which is a HIPPA compliant and a confidential system. There is a minimal risk of identifying information being breached.

#### **Measures**

The first measure was an intake assessment that measured self-reported eating patterns. This data was gathered from the initial implementation of the assessment August 1, 2021, through January 19, 2023, and was collected from all eligible clients. The clients were asked about the following disordered eating categories, 1. Restricting; 2. Restricting/binging; 3. Restricting/purging; 4. Binging/purging and 5. Binging. The levels were broken down into frequencies 1. 1-2 times daily; 2. 1-2 times weekly; 3. 1-2 times monthly; and 4. Never.

Body and Weight Attitude assessment scale, a 14-item measure was created to include questions assessing eating behavior around income and was also based on the DSM-V-TR criteria for eating disorders and the Eating Disorder Diagnostic

Scale, a 22-item self-report questionnaire designed to measure symptomology for Anorexia, Bulimia, and Binge-eating disorder [5]. Although the EDDS has not been extensively studied, it shows reliability and validity to be sufficient in detecting full and subthreshold diagnosis for anorexia, bulimia, and binge eating disorder. The measure used for this study has five sub-scales:

**Subscale 1-Income:** The purpose of this scale was to explore eating patterns around income and food insufficiency as defined by the use of food stamps. This subscale included the following statements: "My food depends on my available income", "I restrict food only when I do not have money to purchase food" and "I use food stamps to buy food".

Subscale 2-Restricting eating and obsessive thought behavior: The purpose of this scale was to explore restrictive eating and thought patterns typically found in restrictive eating disorders such as anorexia. The two statements included in this scale were: "I think about restricting food", and "When I restrict food, I feel better about my body".

**Subscale 3-Body dissatisfaction:** The purpose of this subscale was to examine body dissatisfaction unduly influenced by the disturbance in self-perceived weight and shape, which is the most notable risk factor for eating disorders. This scale included the most statements: "I am unhappy with how my body looks", "My weight affects my self-esteem", "I am unsatisfied with my weight", "I feel depressed when I think about my body" and "I feel shame around how my body looks".

**Subscale 4-Binge-eating and compensatory behavior:** The purpose of this scale was to explore behaviors that are connected to binge-eating disorder and bulimia. This scale includes two statements: "I binge eat food", and "After eating I use purging, over-exercise, or laxatives to control my weight".

**Subscale 5-Emotional distress:** This subscale explored emotional distress around food and eating and included two statements: "I obsess with thoughts about food" and "I get anxious or irritable around food and eating".

The minimum score is 14 and the maximum score is 70. The Likert scale rated the participants answers as never, rarely, sometimes often and always. The higher the score the more the behavior and attitudes are clinically indicated for an eating disorder.

Table 2: Frequencies of disordered eating.

#### **Research question**

Is the prevalence of eating pathology and intense body dissatisfaction in communities of color comparable to prevalence in nationally representative sample?

#### Results

#### **Eating pathology**

A descriptives frequency test was conducted split by race with each of the five pathological eating categories. The restricting food eating pathology was most significant with 30.1% of black and 32% mixed-race of participants reporting restricting food 1-2 times daily or 1-2 times weekly, whereas only 14.8% of hispanic participants and only 11.6% of white participants reported significant restricting behavior (Table 2). Binge-eating behavior, either 1-2 time daily or weekly, was also significant, with 20.6% of the participants of mixed-race reporting the highest frequency and hispanic participants reporting 16.4%, b black participants reporting 13.6% and white participants reporting 11.6% daily or weekly binge-eating behavior. This was consistent in the body and weight attitude assessment scale with the statement "I binge eat food often or always" for the hispanic group 19.7%, interestingly, only 11.3% of mixed-race reported always or often to that statement, even though 20.6% of the mixed-race group reported the highest rates of frequent binge eating behavior. Important to note that only 1.9% of black participants, 2.3% of white participants, 4.1% of mixed-race participants and no hispanic participants reported restricting/ binging monthly.

Not of huge clinical significance, but worth noting, of the 43 white participants, 11.6% reported binge/purging 1-2 times daily or 1-2 weekly, with less than 2% of black and hispanic participants reporting any significant binge purge behavior and no participants of mixed race reporting frequent binge purging behavior. Also, worth noting that only 1.9% of black participants, 2.3% of white participants and no hispanic or mixed-race participants reported restricting and binging monthly, rather 93.2% of black, 93.4% of hispanic, 95.3% of white and 91.8% of mixed race reported never participating in restricting/binge behavior. There were no significant findings in the category of restricting/purging.

Frequencies of restricting				
Black	Hispanic	White	Mixed-Race	
1-2 × daily/weekly	1-2 × daily/weekly	1-2 × daily/weekly	1-2 × daily/weekly	
30%	14.70%	11.60%	32%	
Frequencies of binging food				
Black	Hispanic	White	Mixed-Race	

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1-2 × daily/weekly	1-2 × daily/weekly 1-2 × daily/weekly 1-2 × daily/weekly			
13.60%	16.40%	11.60%	20.60%	
Frequencies of restricting and binging food				
Black Hispanic White Mixed-Race				
Black	Hispanic	White	Mixed-Race	
Black 1-2 × monthly	Hispanic 1-2 × monthly	White  1-2 × monthly	Mixed-Race 1-2 × monthly	

## **Subscale body dissatisfaction**

When conducting body and weight attitude assessment by race we found significant findings, especially in the subscale of body dissatisfaction. With the statement "I am unhappy with how my body looks", 24.3% of black, 36.1% of hispanic, 30.2% of white, and 46.4% of mixed race reported a frequency of either often or always (Table 3). With the statement "My weight effects my self-esteem", 22.3% of black, 36.1% of hispanic, 32.6% of white, and 39.2% of mixed-race reported feeling that often or always. With the statement "I am unsatisfied with my weight", the mixed-race group reported the with 49.5%, reporting that often or always hispanic with 44.3%., black and

white participants reported similar finding with 37.6% of blacks and 37.2% whites reporting feeling this way often or always. With the statement "I feel depressed when I think about my body", 29.5% of hispanics, 26.8% of the mixed-race group, and 25.6% of white participants reported feeling this way often or always. Black participants only scored 8.7% feeling depressed when they think about their body often or always. In the final question in the body dissatisfaction subcategory "I feel shame with how my body looks, 29.5% of hispanics, 28.7% of mixed-race, 23.3% of whites score a frequency of often or always, while a lesser percent, but still significant, 14.6% of blacks reported this frequency of often or always.

Table 3: Attitudes around body and weight.

Table 5. Attitudes around body and weight.				
I am unhappy with how my body looks				
Black	Hispanic	White	Mixed-Race	
Often/always	Often/always	Often/always	Often/always	
24.30%	36.10%	30.20%	46.40%	
My weight effects my self-este	em			
Black	Hispanic	White	Mixed-Race	
Often/always	Often/always	Often/always	Often/always	
22.30%	36.10%	32.60%	39%	
I am unsatisfied with my weigl	nt			
Black	Hispanic	White	Mixed-Race	
Often/always	Often/always	Often/always	Often/always	
37.60%	44.30%	37.20%	49.50%	
I feel depressed when I think about my body				
Black	Hispanic	White	Mixed-race	
Often/always	Often/always	Often/always	Often/always	
8.70%	29.50%	25.60%	26.80%	

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I feel shame around how my body looks				
Black	Hispanic	White	Mixed-race	
Often/always	Often/always	Often/always	Often/always	
14.60%	29.50%	23.30%	28.90%	

#### Subscale emotional distress

In the subscale of emotional distress, the most significant findings were with the 16.3% of white participants stating them often or always "obsess with thoughts around food" with 11.5% of hispanics reporting that frequency. Black and mixed-race participants less with 6.8% of blacks and 9.3% of the mixed-race reporting that frequency. With the statement "I get anxious or irritable around food and eating" there were similar comparisons within the different races with 11.6% experiencing that feeling often or always, 8.2% of hispanics, 9.3% of the mixed-race and 8.7% of blacks reported a frequency of often or always.

#### **Subscale restricting**

In the subscale of restricting, there were significant findings with 23% of hispanics, 18.6% of mixed-race, 14.6% of blacks and 14% of whites reporting often or always to the statement "I think about restricting food". With the statement "When I restrict food, I feel better about my body", 14.8% of hispanics, 14% of white participants, 8.7% of black, and 8.2% of mixed-race reported feeling that often or always.

#### Subscale binging and compensatory behavior

Regarding the statement "After eating, I use purging, overexercise or laxatives to control my weight", the findings of

Table 4: Diagnosis.

frequencies were not as significant, but important to note with the overall incidence of bulimia, 4.1% of mixed-race, 3.3%, of hispanics and 2.3% of white participants reported a frequency of often or always. The black participants score less than 1%. It is important to note that although only 2.3% of white participants reported a higher frequency in the Body and Weight Attitude assessment scale and 11.6% of white participants reported binging and purging daily or weekly in the eating pathology assessment. With the statement "I binge eat food" 8.7% of blacks, 19.7% of hispanic, and 11.3% of mixed-race and 7% of white individuals reported that they binge-eat often or always.

#### **Eating disorder diagnosis**

Of the 103 black participants, 2.9% were diagnosed with unspecified eating disorder, compared to 2.0% in the mixed-race group according to their medical records. Neither of the other racial groups had a diagnosis of EDNOS. The black participants were the only group to have a diagnosis of atypical anorexia at 2.9%. Of the 43 white participants, 4.7% had a diagnosis of binge-eating disorder compared to 1.0% in the mixed-race group. There was no diagnosis of BED in either the black or hispanic groups. There was only one diagnosis of anorexia, which was in the white participant's group (Table 4).

	BED	EDNOS	AAN	AN
Black	0%	2.90%	2.90%	0%
White	4.70%	0%	0%	2.30%
Mixed-race	1.00%	2.10%	0%	0%
Hispanic	0%	0%	0%	0%

#### **Income**

More than half of each racial group reported using food stamps to buy food with 58.3% of black participants, 57.4% of hispanic, 65.1% of white, and 65% of mixed-race participants reporting using food stamps to buy food often or always. The frequencies are far less when responding to the statement "My food intake depends on my available income" with 26.8% of mixed-race, 17.5% black, 16.4% hispanic, and only 2.1% of white participants responding with often or always.

# **Discussion**

The purpose of this study was to explore the prevalence of eating pathology and intensity of body dissatisfaction in communities of color comparable to the prevalence in a nationally representative sample of adults in the U. S. What we found was high rates of body dissatisfaction and high incidence of eating pathology which is not only comparable to the national data for a white population but is higher than what the current data supports for any racialized group. Our data also shows higher rates of eating disorder diagnosis, particularly for AN,

AAN, and EDNOS than what is supported in national representative sample for any racialized group [23]. As we will discuss below, national prevalence of eating disorders and eating pathology may actually be higher than national data supports. It can be argued that weight and race bias prevent proper assessment of body attitudes and eating pathology. Each of the study participants (N=308), were directly asked questions regarding weight and body attitudes and patterns around eating pathology, resulting in higher reported prevalence compared to a national representative sample of adults.

Udo & Grilo (2018) [23] argue that lifetime AN were significantly lower in non-hispanic black and hispanic populations than in white respondents. Further, they found no 12-month AN cases for non-hispanic blacks. However, our data clearly shows that BIPOC communities have high incidence of eating pathology, especially the rates of restricting behavior and high rates of body dissatisfaction, which challenges the claim that BIPOC community are less likely to experience symptomology of an eating disorder and less likely to have an eating disorder. As discussed above, our data in a BIPOC community are not only comparable to the prevalence in a white population but actually surpasses the prevalence of restricting behavior and eating pathology.

We must consider eating disorder assessments and diagnosis through the perspective of weight and racial biases. In looking at three ED disorder categories, AN, BN, and BED, The NIMH reported blacks at the highest statistical percentage of any racial group and of any ED category, for BED at 2%-5% struggling with the disorder, which is a much higher rate than the white or hispanic population. However, our data suggests otherwise, with black participants reported similarly to their white counterparts with the statement "I binge eat food" 8.7% of blacks and 7% of white individuals reported that they binge-eat often or always. With the highest at 19.7% hispanics reporting, they binge-eat often or always, which is much higher than what has been reported for BED at 1%-3.2% [1] if we were to equivalate the frequency of reported binge-eating behavior to a BED diagnosis.

It is important to consider the rates of eating disorder diagnosis within racial groups. As already discussed, people of color are much more likely to be underassessed and underdiagnosed with an eating disorder, especially an ED of restricting type [4]. Of the participants (n=308), 3.9% had a diagnosis of an eating disorder. Black participants had the highest rate of a restricting disorder, AAN, at 2.9%. and 2.9% for a diagnosis of EDNOS. This is much higher than research suggests at 0.2%-0.5% for black individuals [23]. As discussed above, black participant are considered to have the highest rates of BED at 2.0%-5.0% [3], however, none of the black (n=103) participants in our sample had an official diagnosis of BED, whereas 4.7% of white individuals were diagnosed with BED, which is significantly higher than the expected range of 1.6%-3.5% [1]. It is important to note that the hispanic group (N=63) did not have any diagnosis of an ED. Also, interesting to note that not one participant had a diagnosis of bulimia, which does not fit with known prevalence of bulimia, whereas earlier data found the prevalence of bulimia is comparable for white and black individuals with a range of 0.5%-1.5%. This is concerning as our

data shows that 11.6% of white participants and 2% of black and hispanic participants reported binging/purging 1-2 times daily or 1-2 times weekly.

Previous research has focused mainly on investigating eating pathology in marginalized communities through the perspective of poverty and food insecurity; Identifying BED as the primary pathological eating pattern [4]. Our research indicates that there are far more clinical implications to disordered eating patterns in this community such as body and weight dissatisfaction, which is the highest indicator for the development of an eating disorder. Further, our participants, in the black and mixed-race groups, reported significant rates of severe restricting behavior compared to the white or hispanic participants. This counters the racialized stereotype that young white women are the demographic most impacted by severe restricting disorders, such as anorexia [4]. We did see a higher rate in the mixed-race group with frequent binge eating, but no racial group indicated high rates of restricting and binge eating patterns that previous research links to poverty and food insecurity paradox, which challenges earlier research in these communities.

#### **Body dissatisfaction**

Body dissatisfaction is the most notable risk factor in the development of eating disorders [14]. Of the questions asked (N=14) on the Body and Weight Attitude assessment scale, five were specific to exploring body dissatisfaction. The mixed-race group (N=97) rated highest, 46.4% on the statement "I am unhappy with how my body looks", and highest 49.5% on the statement "I am unsatisfied with my weight". On the other three questions the hispanic group and the mixed- race group rated comparably. Interesting to note that black participants rated the lowest on four of the five statements, although they had the highest rates of ED diagnosis. These results are clinically significant and indicate that eating pathology and eating disorders are much more prevalent than previous research suggests.

#### **Future directions**

This is the first study to investigate rates of eating pathology and attitudes around body image and weight in a poorer community with most of the community identifying as people of color. It is important to continue challenging racial biases and stereotypes in the BIPOC community, especially around eating disorders.

#### Conclusion

The assumption is that black and brown individuals struggle with binge-eating, but as we discovered the incidence of restricting food was highest in those communities. Weight and race bias prevent proper assessment of body attitudes and eating pathology, leading to underassessment, underdiagnosis and inappropriate treatment interventions. This exploratory study highlights the need for further investigation, so we don't perpetuate the neglect of these communities in both mental and medical health care.

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#### Limitations

This was an exploratory study with the purpose to investigate the prevalence of eating pathology and intensity of body dissatisfaction in poorer communities of color comparable to a large national representative sample studied. Although the sample studied was from a poorer community, we did not investigate whether income was a factor in restricting behavior. However, we were able to challenge the notion that being poor and food insufficient leads to restricting/binging behavior. This was an exploratory study that explored eating and body attitude and eating pathology through straight forward questionnaires. Much more research needs to be conducted around both individuals of color and eating disorders. Furthermore, this research was conducted in New York City, which generally rates higher than communities in the South in terms of access to healthcare and social determinants of health, so future research should also be conducted in other areas which may not have as favorable health outcomes, as a rule.

#### **Declarations**

Ethics approval and consent to participate.

The procedures were approved by Tulane's Institutional Review Board (IRB). Medical charts were reviewed to obtain the information. Data pulled from the medical record system <sup>®</sup>Medi-EHR, a behavioral health medical record system was analyzed. The level of frequencies with each variable and grouping each variable by race was conducted in <sup>®</sup>Jamovi (Version 2.2, 2021).

# **Consent for publication**

N/A

#### Availability of data and materials

Data is currently in Jamovi (version 2.2)

#### **Competing interests**

The authors declare that they have no competing interests.

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N/A

## **Authors' Contributions**

N/A

# References

- 1. (2022) National Institute of Mental Health.
- Chamay-Weber C, Narring F, Michaud PA (2005) Partial eating disorders among adolescents: A review. J Adolesc Health 37: 416-426.
- 3. (2022) National Eating Disorders Association.

- Woodland SL (2023) Dying to eat: The under-assessment of eating disorders in marginalized communities. J Obes Eat Disord 9: 1-9.
- (2013) Diagnostic and statistical manual of mental disorders, 5th ED. American Psychiatric Association. Washington, DC.
- Becker CB, Middlemass KM, Gomez F, Martinez-Abrego A (2019)
   Eating disorder pathology among individuals living with food insecurity: A replication study. Clin Psychol Sci 7: 1144-1158.
- Becker CB, Middlemass K, Taylor B, Johnson C, Gomez F (2017)
   Food insecurity and eating disorder pathology. Int J Eat Disord 50: 1031-1040.
- Goode RW, Kalarchian MA, Craighead L, Conroy MB, Gary-Webb T, et al. (2018) Perceptions and experiences of appetite awareness training among African-American women who binge eat. Eat Weight Disord 25:275-281.
- Hazzard VM, Hooper L, Larson N, Loth KA, Wall MM, et al. (2022) Associations between severe food insecurity and disordered eating behaviors from adolescence to young adulthood: Findings from a 10-year longitudinal study. Prev Med, 154:106895.
- Herman CP, Poliivy J (1975) Anxiety, restraint, and eating behavior.
   J Abnorm Psychol 84: 66-72.
- 11. Bradenburg BMP, Anderson AE (2007) Unintentional onset of anorexia nervosa. Eat Weight Disord 12: 97-100.
- 12. Middlemass KM, Cruz J, Gamboa A, Johnson C, Taylor B, et al. (2018) Moving beyond weight and shape: Dietary restraint and food insecurity in a marginalized population.
- Chen JY, Piers AD, Lesser EL, Lowe MR (2022) The effect of weight suppression on eating behavior: Does the intentionality of weight loss matter? Appetite 174: 2-8.
- Franco M, Diez Roux A, Glass TA, Caballero B, Brancati FL (2008) Neighborhood characteristics and availability of healthy foods in Baltimore. Am J Prev Med 35: 561-567.
- 15. Sonneville KR, Lipson SK (2018) Disparities in eating disorder diagnosis and treatment according to weight status, race/ ethnicity, socioeconomic background, and sex among college students. Int J Eat Disord 51: 518-526.
- Gordon KH, Brattole MM, Wingate LR, Joiner TE (2006) The impact of client race on clinician detection of eating disorders. Behav Ther 37: 319-325.
- Gordon KH, Perez M, Joiner TE Jr (2002) The impact of racial stereotypes on eating disorder recognition. Int J Eat Disord 32: 219-224
- Simone M, Telke S, Anderson LM, Eisenberg M, Neumark-Sztainer D (2022) Ethnic/racial and gender differences in dosoredered eating behavior prevalence trajectories among women and men from adolescence into adulthood. Soc Sci Med 294: 114720.
- Becker AE, Franko DL, Speck A, Herzog DB (2003) Ethnicity and differential access to care for eating disorder symptoms. Int J Eat Disord 33: 205-212.
- Mond JM, Hay PJ, Darby A, Paxton SJ, Quirk F, et al. (2009).
   Women with bulimic eating disorders: When do they receive treatment for an eating problem? J Consult Clin Psychol 77: 835-844.
- Spotts-de LA, Muhlheim L (2019) Could your higher weight patient have atypical anorexia? J Health Serv Psychol 45: 3-10
- Coffino JA, Ivezaj V, Barnes RD, White MA, Pittman BP, et al. (2022)
   Ethnic and racial comparisons of weight-loss treatment utilization

ISSN 2471-8203

- history and outcomes in patients with obesity and binge-eating disorder. Eat Behav 44: 101594.
- 23. Udo T, Grilo CM (2018) Prevalence and correlates of DSM-5 eating disorders in nationally representative sample of United States adults. Biol Psychiatry 84: 345-354.
- 24. (2022) COVID-19 Medi-EHR Updates. Medi-HER.
- 25. (2021) The Jamovi project. Jamovi.

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