

"Doing Difference" and Fast Food Consumption: Patterns Among a Sample of White and African American Emerging Adults

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Abstract Previous research has demonstrated that frequent consumption of fast food is linked to obesity and that trends in both are disparate across race and sex categories. Contextualizing race- and sex-related factors that structure fast food consumption in emerging adulthood is a much-needed contribution to social research. Specifically, this study uses the "doing difference" framework, to examine the frequency of fast food consumption in a sample of White and African American (18–25 years old). According to the framework, social inequalities are reproduced through dramaturgical performances of race, class, and gender. Results of this suggest that feminine gender orientation and education serve as protective factors, while African American race and male sex serve as risk factors. African American women emerged as especially high risk given their higher prevalence of traditionally masculine traits.

Keywords Fast food · Gender theory · Health inequalities · Race · Emerging adulthood

Introduction

Obesity is a social problem that impacts both individual and public health. According to the CDC [16] report, 36.75% of Americans are considered *obese*, which is defined as having a body mass index (BMI) score of \geq 30. A closer look at trends in obesity prevalence shows that the rate is much higher among African Americans, at 48%. In addition, African

American men with a lower socioeconomic status (SES) and women with a lower SES from all racial groups have the highest rates of obesity. Those who are considered obese experience a gamut of health concerns. Examples include insulin resistance, type 2 diabetes, and cardiovascular disease [44].

The medical care needed to address these concerns is costly and has created an economic crisis for the entire nation. Cawley and Meyerhoefer [15] reported that 21% of medical spending goes to obesity-related treatments. Dee and colleagues [23] reviewed obesity studies of both *direct* costs (hospital stay, physician's services, prescriptions, rehabilitation, and administrative fees) and *indirect* costs (increased sick days or absenteeism, early retirement, and short- or long-term disability). They found that reports have ranged from \$5 to \$42 billion dollars annually, for the past 10 years. Therefore, based on the health and economic costs of obesity, it is vital that we understand its predictors and work to address them.

Regular consumption of fast food has been shown to promote weight gain [16]. Fast food is defined as food items that come from restaurants with prompt food service, carryout food options, limited or no wait staff, and payment prior to receipt of food ([11], p. 2). Individuals who eat fast food two or more times per week are considered *regular consumers* [2]. Regular consumers of fast food have higher calorie diets; greater amounts of dense, low-nutrient calories; and higher percentages of body fat [6, 13]. Like obesity, a closer look at fast food consumption rates shows disparities across sociodemographic categories: (1) 52% of African Americans consume fast food weekly, compared to 46% of Whites and (2) fast food makes up around 15% of the calories African Americans consume, compared to the national average of around 11% [27]. Emerging adults 18 to 25 are also overrepresented in fast food consumption trends (weekly consumption 57% and caloric intake around 21.1%) and men (weekly consumption 53%). The disparate nature of these

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trends calls for a sociological analysis of consumption. It is vital to examine questions like, "Why do men eat more fast food than women?", "Why are African Americans more likely to eat fast food when compared to other race groups?", and "How do psychosocial aspects of aging promote fast food consumption among emerging adults?"

To date, there has been little research regarding sex disparities in health risk behaviors. Considering the effect of gender orientation would add context to future research. There is sociological evidence that engaging in health risk behaviors is a part of "doing gender," or an ongoing public performance that serves to reproduce gendered social structures [84]. Within such structures, men are expected to act in masculine ways and women are expected to act in feminine ways. Montelius and Nygren [56] argued that women with high levels of gender identification eat healthy foods to convey that they are conscientious and law-abiding. They also claimed that men with high levels of gender identification eat unhealthy foods to convey dominance and autonomy to reject the establishment.

In his theory of health risk and masculinity, Courtenay [21] contended that taking risks is a sign of manliness, and that risk involvement is guided by a man's race and social position. His work touched on how some aspects of femininity related to risk, but failed to address how race shaped risk for women too. White men and women are expected to maintain small, fit bodies as the hegemonic ideal in Western cultures [63, 71]. African Americans, however, are socialized to desire larger frames [61, 66]. [82] found that individuals are more likely to connect abundant food with love and familial well-being when they (1) are born into poverty, which is the case for one out of four African Americans [52] and (2) experience food insecurity. In addition, Lee [48] claimed that there is a belief among African Americans that thin people are potentially poor, battling a disease, or chemically addicted. Within this perspective, the contrasting nature of socialization in race and gender roles may explain the variance in fast food consumption rates.

A formal analysis of the social processes that create sex, race, and age gradients in fast food consumption is missing from the literature. Current CDC reports on fast food consumption provide evidence that existent health prevention programming has ineffectively reached men, African Americans, and emerging adults. The goal of this analysis is to determine if health inequalities are shaped by sociodemographic performances or "doing" difference [83]. I use ordinary least squares (OLS) regression to test the predictive power of race (White and African American), sex (male and female), and gender identity (based on results from the Bem sex role inventory). If the doing difference framework holds, White, feminine young women should be the least frequent consumers of fast food.

Background

Fast Food Consumption

Frequent fast food consumption is a health-risk behavior that can contribute to the onset of obesity [14, 59]. Each meal has been shown to contain an average of 1000–2000 cal. In addition, portion sizes have increased overtime. The size of cheeseburgers has increased by 33%. In his review of studies on the biological implications of fast food consumption, Rosenheck [67] concluded that *energy density*, or the energy content per unit weight of food, is the major mechanism through which fast food consumption leads to higher BMI scores. Thus, it is critical to understand the social structural factors that lead to frequent fast food consumption.

There are several sociocultural factors that explain why the African American race has become a risk factor in terms of fast food consumption. A history of systematic relocation, segregation, and substandard housing has made racial segregation a fundamental cause of health outcomes for African Americans [25, 87]. Fast food *density*, defined by Kwate [47] as the number of fast food restaurants per square mile, is greatest in predominantly African American communities and is one mechanism by which racial segregation predicts poor health. In their study of fast food density, Reitzel and colleagues [65] found that proximity to fast food increases the BMI of residents by 2.45% per mile from the restaurant. Also, according to James and colleagues [43], density is greatest in predominantly African American census block groups, with Washington D.C., Mississippi, South Carolina, Delaware, and New Jersey leading nationally.

The intersection of the African American race and womanhood may also increase one's likelihood of frequent fast food consumption. Sociological research suggests that exposure to stress and discrimination leads African Americans to hyper age. This process is known as *weathering*, where the global health of African Americans deteriorates at faster rates than the national average [34]. This hyper aging pattern is guided by a combination of poor macro level conditions and healthrelated choices. Beauboeuf-Lafontant ([8], p.106) asserted that African American women's higher obesity rates and binge eating habits are a negative implication of the strong Black woman script, "a social script that acknowledges them primarily when they tolerate the intolerable." The concern is that, although African American women appear to wear many hats successfully, the truth is that the accumulation of disadvantages creates stress [78], and that structural racism and gender oppression overexpose these women to stress [80]. In their study of college-age African American women, Diggins, Woods-Giscombe, and Waters [24] found a significant relationship between perceived stress, contextual stress, and eating behaviors. In addition, [19] provided a perspective on "doing" Black femininity, which involves portraying a social

construction of gender created by non-Black women, in an attempt to distinguish "us" from "them." A direct consequence of this outside construction is that popular depictions of African American women are overstated and too controlling. Specifically, African American women are depicted as the promiscuous Jezebel (curvy) or the asexual Mammy (fat) [46]. To women of color, the complex relationships among race and embodiment can make eating fast food more attractive.

Poverty is a socio-demographic marker that disproportionately impacts African Americans and is another fundamental cause of poor health habits [50]. According to Williams and Jackson [86], individual's diets are shaped by their SES. Those with lower SES take health risks by consuming more fats and salts [22]. Those with higher SES take more health precautions by consuming more fruits and vegetables. Poverty also limits one's means of transportation. In their study of fast food consumption among children, Khan, Powell, and Wada [45] found that, regardless of race, those from lower-income families were more likely to consume fast food based on proximity. Finally, poverty makes establishing a sense of self almost impossible in a capitalist society [75]. Huppatz [41] claimed that fast food bags can be used as objectified cultural capital. Bourdieu [12] defined objectified cultural capital as cultural goods or objects used to establish one's social position. As a result, fast food bags allow individuals to establish their connection to American culture for a low price.

Age is a final socio-demographic characteristic that serves as a risk factor for frequent fast food consumption. An examination of trends in emerging adulthood shows that participation in risky health behaviors is most prevalent during this developmental stage [3]. Sociological [62] and psychological [39] examinations of young adults have revealed that this group has a sense of invulnerability, which makes them feel immune to the consequences of their behaviors. During this developmental stage, the common experience of engaging in risky behavior serves as a countervailing mechanism, defined in Lutfey and Freese [51] as a social force great enough to change the impact of SES on health outcomes. Arnett [4, 5] described emerging adulthood as a time of exploration. Parents, schools, and employment do not guide individuals' behaviors during this time. Ioannou [42] interviewed adolescents (ages 15-19) and found that fast food consumption is a part of "doing" youth. The respondents reported that homecooked meals are "dated" and that fast food is "modern." They also claimed that conscientious young eaters are weird, uncool, and not risky enough. Vankim and Laska [81] empirically demonstrated this through their study of several health behaviors and SES. According to their results, young adults, with both high and low financial pressures, had fast food consumption rates of around 19%. In summary, many young adults are vulnerable to their own drive to be risky and a need to dissociate themselves from older adults.

In terms of protective factors, cultural standards regarding ideal body types make White Americans less likely to consume fast food. The food diaries of African American and White American children show that these norms are internalized as early as 9 years old [73]. Merten, Wickrama, and Williams [54] found that women with higher BMI scores had higher depression scores and more stagnant careers. In their analysis of news articles on over and under eating, Saguy and Gruys [71] found an empathetic tone in reports of White women with eating disorders. For this demographic, anorexia and bulimia are seen as negative implications of greater social pressures. White men are also expected to avoid obesity. Trautner, Kwan, and Savage [79] studied social perceptions of men's bodies in a sample of undergraduate students and found that fat, White men were described as less of the following: of a leader, intelligent, competent, successful, masculine, and hardworking than their fat African American counterparts.

High SES is a second socio-demographic characteristic that serves as a protective factor for members of our society. According to the fundamental cause perspective, high SES allows individuals to mobilize their resources when healthrelated recommendations are made. As a result, individuals who understand health risk and have the means to get to healthier food will do so, even if fast food restaurants are nearby. From a social psychological perspective, Montelius and Nygren [56] reported that individuals with high SES, who consume fast food, are more likely to hide from their social network because of the policing and judgment they receive.

Theoretical Framework: Doing Difference

The major assumption underlying the doing difference framework is that race, class, and gender are omni-relevant aspects of our identities that guide every interaction in which we take part. Specifically, West and Fenstermaker [83] argued that individuals use dramaturgical performances to convey the socially constructed and structured reality for members of their race, class, and gender. A second assumption is that we live in a culture where wealthy, White, masculine men dominate. This means "doing" difference (race, class and gender) benefits some while oppressing others. This ideal, or hegemonic, masculinity is accomplished through White men's "work in the paid labor market, subordination of women, heterosexism, and driven and uncontrollable sexuality" ([55], p. 82). It is also important to note that, although the doing difference framework does not describe the effect of age in any detail, sociologist [20] suggested that age is another aspect of our identities which is constantly subjected to accountability. To minimize the effects that maturity and cohort membership have on fast food consumption trends, and better understand a high-risk life stage, this analysis will focus on emerging adults (ages 18–25).

Social accountability is at the center of successfully "doing" difference. West and Fenstermaker [83] argued that individuals are held accountable for both normative and deviant actions. Behaviors that are considered "abnormal" for members of specific race, class, and gender categories are scrutinized by others and coded as unacceptable. Individuals should anticipate scrutiny if and when they repeat these behaviors in the future. Behaviors that go unnoticed or receive praise are coded as acceptable. Individuals experience little anxiety when they repeat them in the future. Hollander [38] revisited "doing" and claimed that researchers have failed to measure accountability the way West, Zimmerman, and Fenstermaker defined it. To reconcile that concern, Hollander [38] created an approach to measuring accountability, which considers (1) biological orientations or sex category, (2) assessments both self-imposed and reviews of others, and (3) enforcements or accountability rituals. These rituals dictate that one must perform in a normative manner (being a feminine woman) to realign with one's identity categories after a failed attempt (being a masculine woman). Accountability is relevant to this study because peer influence is central to adolescents' choices regarding eating and physical activity [72] and social isolation in emerging adulthood is related to emotional eating [29]. This becomes a concern when "doing" difference because trends in eating and physical activity are influenced by race and gender, as well as, presumably, peer influence.

Doing difference is not just a social process enforced by accountability. It is also an autonomous experience. This means the role of personal agency must be considered, even in group-level analyses. West and Zimmerman [84] claimed that our micro interactions allow us to dramaturgically portray larger social structural ideals. Schwalbe and Schrock [74] claimed that individuals assess the *identity stakes*, or social cost of improperly doing difference, prior to taking part in any social interaction. Therefore, actors have the autonomy to (a) behave in pro-social ways that match socially prescribed norms or (b) act in antisocial ways that may come with negative reception. Mulvaney-Day, Womack, and Oddo's [58] study of 18-25-year-old fast food employees uncovered both macro and micro factors that shape the health autonomy of workers during mealtimes. Respondents cited hunger, food knowledge, negative physical implications of consumption, perceived food options, ability to delay gratification, and their subjective definition of "normal eating" as the micro level factors that informed their fast food consumption. The concern, however, was that workers had to consider these factors within structurally constraining environments. They claimed to be restricted by time for eating, time for food preparation, short break times, limited healthy options on the menus, cost, and gender norms-male staffers "try to outdo each other" by creating massive meals ([58], p. 359). Cooking emerged as an

interesting way the constrained workers exercised their health autonomy. Using the ingredients available to them, staffers prepared food for themselves with lower levels of calories and sodium.

Summary

To summarize the current literature, race, sex, and their influence on social class have been shown to shape trends in fast food consumption and contribute to existent health disparities. The literature also shows that middle and upper class members of society have access to health-promoting foods and classbased social pressures maintain a healthy lifestyle [50]. To achieve hegemonic femininity, women must convey themselves as (1) conscientious of and compliant with health recommendations and (2) capable of maintaining a thin frame [56, 71].

Although norms around femininity and embodiment call for women to be conscientious eaters, African American women have obesity rates and fast food consumption patterns that would be expected from men. The nature of African American women's eating is a public health concern that must be understood from a sociocultural perspective. African American women endure both racism and sexism in their daily encounters and may be using fast food as a coping tool. As African Americans, they are more likely to (1) receive praise for having extra weight and (2) live in close proximity to fast food [47, 61, 66]. Both of these circumstances may mute or neutralize White American embodiment standards for them. To date, trends in fast food consumption have been understudied in the field of sociology. The impact of gender identity and intersectionality on risk behaviors has been overlooked because the "obesity epidemic" is viewed as an "American" reality, not a raced, gendered, and aged reality. This work makes three major contributions to the literature. It brings together medical sociology and gender studies. It provides insights into racial differences of the effects of gender identity on health. Finally, it provides insights into intersectional experiences of emerging adulthood.

Figure 1 below shows the conceptual model for fast food consumption by sex, gender, and race. I hypothesize that there are differential patterns across sex, gender, and race, and that the patterns also differ at each socio-demographic intersection of the three.

The first hypothesis is explored using a sample of White and African American emerging adults:

H1: White Americans report consuming significantly less fast food than their African American counterparts.

Using two analytical models, one for the White American sample and one for the African American sample, this study explores the remaining hypotheses:



(+) greater frequency of fast food consumption associated with identifier (-) lesser frequency of fast food consumption associated with identifier

Fig. 1 Conceptual model: fast food consumption. (+) greater frequency of fast food consumption associated with identifier. (-) lesser frequency of fast food consumption associated with identifier

H2: Females report consuming significantly less fast food than their male counterparts.

H2a:The sex gap in fast food consumption is significantly smaller among African American men and women

H3: Men and Women who score high on feminine identity have a higher probability of consuming less fast food than their masculine counterparts

H3a: The gender gap in fast food consumption is significantly smaller among African American men and women

H4: White, feminine women have a higher probability of consuming less fast food than their counterparts from all other intersections of sex, gender, and race.

Data and Methods

The Longitudinal Study of Adolescent to Adult Health (ADD Health) is the largest longitudinal sample of adolescents. It is a comprehensive data set containing health information for a nationally representative cohort of young adults beginning in 1994. This analysis uses data from the public use sample collected in Wave 3. At the time of Wave 3, August 2001 to April 2002, the respondents' ages ranged from 18 to 28. For the sake of this study of emerging adulthood, respondents ages 26 and older (N = 52) will be removed from the analysis. In addition, only participants who reported on their gender identity are included in the analysis. There were a total of 4830 respondents in the public access dataset for Wave 3, but this study

will be limited to, African American (N = 252) and White American (N = 806) participants.

The dependent variable in this study is fast food consumption, which was operationalized as, "How many times in the past seven days did you eat food from a fast food restaurant, such as McDonald's, Burger King, Wendy's, Arby's, Pizza Hut, Taco Bell, or Kentucky Fried Chicken or a local fast food restaurant?" This measure is potentially limiting based on Block and colleagues' [11] definition of a fast food restaurant. Individuals who consumed food at unnamed establishments which met the criteria may have failed to answer affirmatively. It is also limited as a measure of how often respondents consumed, rather than what they consumed. The best way to test for obesity risk would come through access to portion sizes and energy density [6]. A final potential limitation is social desirability bias. As a known health-risk behavior, it is possible that respondents under- or overstated their consumption patterns, based on their position regarding risk-taking.

The validity of this measure is established by Harris and colleagues [36], however, who found significant increases in fast food consumption among Native American females and Asian American males from Wave 2 (adolescence) to Wave 3 (young adulthood). Previous quantitative research examining fast food consumption has used (1) a continuous measure of consumption as a predictor of changes in BMI over time [26] and (2) a dichotomous measure as part of a risk scale used to investigate the effects of well-being on health risk [40]. To capture the greatest amount of variance, the reported frequency of fast food consumption will be measured continuously in this study.

The key independent variables in this study are measures of sex and gender identity. Respondents were asked to categorize their biological sex as (1) male or (0) female. Gender identity is measured using the short-form of the Bem sex role inventory (BEM). The BEM is a 60-point scale including measures of traditional masculinity (M) and femininity (F) [9, 85]. Previous research has demonstrated that the shortform (including 30 gendered adjectives) is more reliable and valid than the original form which contains 60 attributes [17]. Respondents who rate high in F and not M are considered feminine, high in M but not F are considered masculine, low in both M and F are considered androgynous.

To measure gender identity, respondents reported how often they identified with a series of gendered traits. Responses to the Bem range from (1) never or almost never to (7) almost always true. Measures of masculinity included the following (in the order they appear on the questionnaire): (1) I defend my own beliefs, (4) I am independent, (7) I am assertive, (10) I have a strong personality, (13) I am forceful, (16) I have leadership abilities, (19) I am willing to take risks, (22) I am dominant, (25) I am willing to take a stand, and (28) I am aggressive. Measures of femininity included the following: (2) I am affectionate, (5) I am sympathetic, (8) I am sensitive to the needs of others, (11) I am understanding, (14) I am compassionate, (17) I am eager to soothe hurt feelings, (20) I am warm, (23) I am tender, (26) I love children, and (29) I am gentle. Feminine and masculine Bem scores were created by taking the average of individual measures [9, 85].

As indicated earlier, measures of social class will be included in the study, but not as key interaction terms. Education and employment status will be included as proxies for SES. According to Ross and Wu [69, 70] and Mirowsky and Ross [68], it is vital to consider the role of education in studies of health disparities. Responses to "What is your highest level of education to date" will be analyzed categorically as (1) less than a high school diploma or GED, (2) high school graduate, (3) some college education, (4) college graduate, or (5) college

Table 1Descriptive statistics forAll analysis variables

graduate+. Employment status is an indicator of social class that is useful in studies of gender. Women are shown to face more economic oppression when they are not participants in the paid workforce [60]. In addition, work status is also useful in studies of health risk [10, 76]. Responses to "Have you worked mostly full or part time" were categorized as (2) full-time, (1) part-time, or (0) none.

Self-rated health [30] and breakfast consumption [36] are traditional control variables used in studies of fast food consumption. However, they are omitted from this study of doing difference because there are documented relationships between the two variables and race, class, and gender. I believe that race, class, and gender measures serve as proxies for a gamut of conditions that influence health and food choices.

Analytic Strategy

To understand the relationships between race, sex, gender, and fast food consumption, I created two ordinary least squares (OLS) analyses. One included the White American respondents and one included the African American respondents. OLS regression allows social researchers to test for multivariate relationships among continuous outcome variables and a set of controls [89].

Results

Distributions for all measurements can be found in Table 1 below. The majority of both subsamples consisted of females, with an educational attainment of some college completed, and part-time employment status. The White American group had an average fast food consumption rate of 2.17 times per

	White Ame $(N = 806)$	rican san	nple	African American sample $(N = 252)$		
	Mean or % coded (1)	Std. dev.	Range	Mean or % coded (1)	Std. dev.	Range
Dependent variable						
Fast food consumption (frequency per week $0-7\times$)	2.17	1.93	0–7	2.92	2.18	0–7
Control variables						
Sex $(1 = male)$	40%	0.49	0-1	32%	0.49	0-1
Work $(2 = \text{full-time}, 1 = \text{part-time}, 0 = \text{none})$	1.57	0.64	0–2	1.43	0.72	0–2
Education $(1 \le HS, 2 = high school, 3 = some college, 4 = college grad, 5 \ge college grad)$	2.62	0.96	1–5	2.68	0.93	1–5
Independent variables						
Feminine Bem scale	5.75	1.01	1–7	5.68	1.07	1–7
Masculine Bem scale	5.13	0.96	1–7	5.20	1.03	1–7

week and the African American sample had an average of 2.92 days per week.

Table 2 shows cross tabulation results for gender orientation and sex. A comparison of the female samples shows that most White American women reported high levels of feminine gender identity and low levels on the masculinity scale. African American women, however, reported low levels on the femininity scale and higher levels of masculine gender identity. The majority of men from both samples reported low levels on the femininity scale. Most White American men reported a low level of masculinity, while most African American men reported high levels of masculine gender identity.

Results of correlation analyses, by race, are in Tables 3 and 4 below. Table 3 displays the White American sample. For this group, male sex (+) and education (-) correlated with frequency of fast food consumption. Table 4 displays results for the African American sample. For this group, feminine gender orientation (-) correlated with frequency of fast food consumption.

Regression results are displayed in Table 5 below. The first three regression models show results for both White and African Americans. Results from the combined sample that African Americans are much more likely to consume fast food, and there are no significant distinctions by sex and gender orientation. Next, to test for gender differences by race, there are three regression models for each race group. Model one shows the main effect of sex on the frequency of fast food consumption, with controls for SES. Model one (and all other models) showed significance with an F score *p* value <0.01. Male sex ($\beta = 0.31 \ p < 0.01$) significantly predicted higher frequencies of fast food consumption for the White American sample. Sex had no significant effect on fast food consumption rates in the African American sample.

Model two of Table 5 shows the main effect of sex with the addition of the Bem scales to measure the main effect of gender identity. In this model, male sex continues to predict higher frequencies of fast food consumption for White Americans. Measures of gender, however, showed no significant relationships. In the African American sample, the effect of sex remained insignificant. The inclusion of the BEM scales, however, showed that feminine gender identity $(\beta = -0.46 p < 0.01)$ predicts less frequent fast food consumption for African Americans.

Model three of Table 5 tests the main effects of sex and gender as well as a possible interaction between the two. The inclusion of interaction terms left no significant relationships in the White American sample. The interaction terms also showed no significance in the African American sample, but including them increased the effect of feminine gender identity ($\beta = 0.52 \ p < 0.01$) on fast food consumption. In the interest of parsimony and model fit, model two is the most predictive for both groups.

Discussion

This analysis contributes to the literature on health inequalities by examining the effects of sex and gender on the frequency of fast food consumption in racially homogenous subsamples. Previous work applying gender theory to the study of health risk has been largely theoretical and qualitative in nature [21, 34, 56, 71]. In addition, quantitative studies of fast food consumption have included sex and race as control variables, without considering the effect of gender orientation [14, 24, 65]. This quantitative investigation showed partial support for my major hypothesis, H4, that feminine, White American women would consume less fast food than their counterparts from all other intersections of sex and gender.

To begin, I found support for hypothesis 1 that African American respondents would consume more fast food than their White American counterparts. This finding indicates that the sample understudy matched trends found in previous research [33]. Next, I found partial support for hypothesis 2. In the White American subsample, female respondents reported less fast food consumption than their male counterparts. According to the *White male effect*, compared to all other race and sex combinations, White men are the least averse to engaging in risk behaviors [31]. This openness to risk has been attributed to White men having a hand in creating risk reduction strategies and an awareness of the ways to decrease the long-term effects of risk behaviors. It is possible that this sample of White men have a lower level of perceived long-term risk around fast food consumption based on their age. Young

2 Sex and gender ation by race $(N = 1058)$		Moderate femininity (1–3)		Feminine orientation scored 4–7 on Bem (7 = high)		Moderate masculinity (1– 3)		Masculine orientation scored 4–7 on Bem (7 = high)	
		Female	Male	Female	Male	Female	Male	Female	Male
	White American sample (%) African American sample (%)	47 53	70 68	53 47	30 32	79 71	78 77	21 30	22 23

Table orient:

Table ? Diversity correlations										
WA sample $(N = 806)$		2	3	4	5	6				
	1. Fast food consumption	0.11*	0.05	-0.19*	-0.05	-0.05				
	2. Sex $(1 = male)$		0.20*	-0.12*	0.01	-0.31*				
	3. Work (0–2 FT)			0.05	0.10*	-0.02				
	4. Education $(1-5 \ge \text{college grad})$				0.13*	0.16*				
	5. Masculine Bem score					0.45*				
	6. Feminine Bem score									

*Correlation is significant at the 0.05 level

White men may be more likely to see fast food consumption as a short-term eating strategy, e.g., during a time when they are away from their parents, and not married or cohabitating [3]. This allows them to avoid help and maintain some level of sustenance. They are also freed from the burden of risk because the deleterious effects of short-term poor eating habits can be reversed or slowed down.

The lack of support for hypothesis 2 in the African American subsample illuminates that extant sex disparities in fast food consumption may be a part of a larger story of intersectionality. For African Americans, many cultural and structural factors work to promote fast food consumption. These factors supersede the risk associated with maleness. Analyses of fast food density show that, social class aside, African Americans are the most segregated racial group, and that predominantly African American communities are inundated with fast food advertising dollars are spent on reaching African American consumers [36]. Next, African Americans have a subculture specific preference for both larger frames and spicy and fried foods [1].

I also found partial support for hypotheses 3, that men and women who score high on the femininity scale consume less fast food than their masculine counterparts, and for H3a, that the gap would be smaller among African Americans. On the contrary, this analysis revealed that feminine gender identity has a unique protective effect for African Americans. According to Courtenay [21], because they cannot use traditional means (career success, marriage, and homeownership) to establish masculinity, men from oppressed groups engage

Table 4Bivariate correlations AA sample (N = 252)

	2	3	4	5	6
1. Fast food consumption	0.04	0.03	-0.04	-0.02	-0.14*
2. Sex $(1 = male)$		0.04	-0.10	-0.06	-0.21*
3. Work (0–2 FT)			0.02	0.06	0.01
4. Education $(1-5 \ge \text{college grad})$				0.21*	0.22*
5. Masculine Bem score					0.66*
6. Feminine Bem score					

*Correlation is significant at the 0.05 level

in hyper masculinity, which calls for taking the most detrimental risks. It is possible that feminine African Americans consume less fast food because they also engage in hyper gendered behaviors, in this case, more cooking. Household cooking is viewed as traditionally feminine and is generally introduced to girls in early childhood [88]. It is also one of several tasks that has defined Black femininity throughout American history [18]. A second possibility is that African Americans who subscribe to hegemonic femininity are acutely aware of the ideals around slim bodies, and avoid fast food for the same reasons as White American women.

Despite feminine gender identity emerging as a protective factor for African Americans, one question that remains unanswered is, why do African American women have the highest rates of obesity? According to cross tabulations, 30% of African American women identify as highly masculine. Their rate is higher than all the other intersections of race and sex included in this study. This means that many African American women do not experience the latent benefits of aspects of traditional femininity. A closer look at the masculinity scale shows the measures could be conflated with strength—as described in the strong Black woman script. Statements, such as I am independent, I am assertive, or I have leadership abilities, may be ineffective measures of gender for African American women who have been shown to engage in identity work to convey strength. With constant reminders of imminent single parenthood, it is possible that African American women focus on education and career stability in ways that women from other race groups do not. This finding speaks to the importance of including both sex and gender in analyses of health disparities.

Previous research connecting the lived experiences of African American women to trends in overeating have used samples of college-age or impoverished women [24, 28]. In one case, African American women in college may be more masculine as a means to navigate a traditionally White, male space [62]. In the other case, African American women with low SES, who are more likely to head their household, may be more masculine as a means to navigate the traditionally White, male role of provider. Future research is needed to examine this possible conflation of a culture of strength and gender identity. According

	Combined sample			White American sample			African American sample		
	Model 1 β (SE)	Model 2 β (SE)	Model 3 β (SE)	Model 1 β (SE)	Model 2 β (SE)	Model 3 β (SE)	Model 1 β (SE)	Model 2 β (SE)	Model 3 β (SE)
Sex $(1 = male)$	0.21 (0.13)	0.18 (0.14)	0.81 (0.80)	0.31* (0.14)	0.34* (0.15)	0.77 (0.90)	0.14 (0.29)	-0.03 (0.30)	2.42 (1.69)
Work (0-2 FT)	0.10 (0.10)	0.10 (0.10)	0.15 (0.10)	0.14 (0.10)	0.15 (0.10)	0.15 (0.10)	0.10 (0.19)	0.08 (0.19)	0.05 (0.19)
Education $(1-5 \ge \text{college} \text{grad})$	-0.32** (0.06)	-0.31** (0.06)	-0.32** (0.07)	-0.37** (0.07)	-0.37** (0.07)	-0.37** (0.07)	-0.09 (0.15)	-0.05 (0.15)	-0.06 (0.15)
Race (1 = African American) Dependent variables	0.83** (0.15)	0.82** (0.15)	0.82** (0.15)						
Feminine Bem score		-0.07 (0.07)	-0.07 (10)		0.06 (0.08)	0.10 (0.12)		-0.46** (17)	-0.52* (0.23)
Masculine Bem score		0.03 (0.07)	0.08 (0.10)		-0.09 (0.08)	-0.09 (0.10)		0.29 (18)	0.50 (0.23)
Fem*sex			-0.01 (0.15)			-0.09 (0.16)			0.09 (0.35)
Masc*sex			0.12 (0.16)			0.01 (0.16)			-0.57 (.36)
Constant	2.76**	3.02**	2.76**	2.82**	2.90**	2.65**	3.00**	4.07**	3.39**
R sq.	0.057	0.058	0.059	0.047	0.048	0.049	0.004	0.030	0.043

 Table 5
 OLS regression predicting fast food consumption

*p < 0.05, **p < 0.01

to Mulvaney-Day and colleagues [58], it is best to let respondents define what the variables of interest mean to them. Social scientists should work to uncover African Americans' definitions of masculine and feminine, rather than those which are imposed by society.

Finally, controlling for SES revealed that education, not employment, decreases the frequency of fast food consumption for White American emerging adults. Because emerging adulthood is not a time noted for personal career success, education may be the one aspect of social class that truly stratifies this group. This finding aligns with medical scholarship that shows that social conditions predict health choices [50] and that education has a greater impact on health than on income [68–70]. Education opens doors to more stable employment and greater healthcare. It also means exposure to health education and the ability to read and understand food labels. Additionally, there are personal benefits (time saved, low cost, proximity) and structural constraints that work to promote fast food consumption among less-educated individuals [50, 61].

Limitations

This study has several methodological limitations. First, the doing difference framework may be the wrong lens to guide a study of African American health risk. According to Black feminist theory, equating race, class, and gender in an equal manner understates the disadvantages that come with racial minority status [19]. The results of this study, namely the null

effects of sex and education on African Americans' consumption rates, provide support for Hill Collins' critique. Future research on gender identity and fast food consumption should analyze race groups independently.

Second, self-reported race and sex are not the best measures to use to capture their impact on health. More appropriate measures include a continuous variable with a range of skin tones; measures of acculturation, or time in the USA; urbanicity; self-reported instances of racism; and neighborhood segregation; and the most effective, yet logistically challenging, is to have both the respondent and researcher report the respondent's race. This system captures self and social constructions of race. The same argument can be made for the dichotomous measure of sex. According to Tate and colleagues [77], the most inclusive measure of sex accounts for transitions. They recommend the use of two questions, one where respondents report their sex at birth and one where they report their sex at the time of the survey.

Third, several critiques of the Bem scales have been published and addressed by social researchers [7, 37]. One assessment of concern comes from critical race scholars like Harris [35, 49]. They argue that the Bem is not useful in measuring gender identity among respondents of color. Specifically, each researcher contends that the Bem should be limited to studies of European Americans or "American" culture. Because the doing difference framework is rooted in the notion that White ideals dominate American culture, and non-Whites "do" identity work to meet or redefine those ideals, it is appropriate for this study to gauge how "American" or hegemonic the gender identity of these respondents tends to be.

Limitations aside, this study contributes to the health and inequalities literature in several ways. First, Courtenay's [21] theoretical application of doing masculinity and health risk is the dominant framework in the literature. The current study provides an empirical test of his theory and advances the field by including women and femininity. Second, according to Williams and Sternthal [87], race is the most understudied area of medical sociology. Third, this study showed that, among White American emerging adults, fast food consumption is promoted by male sex and lower levels of educational attainment. Finally, this study illuminated the impact of gender orientation on health risk among racial minorities. There also is evidence that Hispanic men (37%) and women (41%) have obesity rates (CDC 2012) and weekly fast food consumption rates (53%) that exceed the national average. Future research is needed that examines "doing" and fast food consumption among Hispanic American emerging adults. An analysis of Hispanic American emerging adults was beyond the scope of this study because White and African Americans are race groups (shared complexion, hair texture, and eye shape), while Hispanic American is an ethnic group (shared sociocultural practices and beliefs). Plus, there are culturally diverse experiences within the larger Hispanic ethnic group. When compared to Mexican Americans, for example, Cuban Americans have many health-related advantages [57]. They are twice as likely to graduate college, have lower poverty rates, and have higher rates of health insurance. Cuban Americans are also twice as likely to be foreign born. Firstand second-generation Hispanic American immigrants enjoy what is known as the Hispanic paradox, where low SES does not predict poor health because traditional practices countervail the negative implications of poverty [32]. So future research is needed that considers the racially and ethnically diverse lived experiences of Hispanic Americans.

Based on these findings, future prevention work should consider the role of "doing" on fast food consumption among at-risk young adults in an attempt to address this growing public health concern. The ongoing fatherhood initiative provides an excellent model of how the government is working to redefine "doing" for disenfranchised men [64]. The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 has decreased government spending on welfare programs and led to a surge in research of single parenting [53]. The most common finding was that children raised by single mothers were more likely to be financially and/or socioemotionally disadvantaged. In an attempt to promote marriage and to re-engage low-income fathers, family support programs are working to construct a new role for fathers. The new dad is a playmate and a helper, not just a provider. This method of "doing fatherhood" allows unemployed dads to "feel like men" and provide the socio-emotional support their children need. Perhaps, obesity-related prevention efforts aimed at emerging adults should target healthier ways to "be a man"

and appeal to individuals with limited education. In the case of African Americans, if femininity is a protective factor, but structurally challenging for this group to subscribe to, obesity-related prevention efforts should focus on healthier ways to "do" stress in general, and healthier ways to "do" food consumption in particular. Complete abstinence from fast food may be an overzealous or unrealistic goal for prevention workers to promote. The reality is that fast food is a pervasive global industry that is here to stay. A more viable objective is to assist at-risk young adults in navigating identity concerns and social constraints at mealtimes.

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Compliance with Ethical Standards

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Ethical Approval This article does not contain any studies with human participants or animals performed by the author.

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