How Identity, Stressors and Obesity should be considered in Intervention Programs to Reduce Chronic Disease Risk among Southern Middle-Aged African American Men

By

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Introduction

Within the United States, African American men one some of the lowest rates of life expectancy and highest rates of premature mortality of any population; the leading causes of death for African American men are chronic illnesses (e.g. cardiovascular disease and cancer) (CDC, 2012; Heron, 2013). Furthermore, nationally the highest rates of obesity and premature mortality from chronic diseases are found within the Southeastern region (Remington et al., 2013; CDC, 2014). Therefore, not only are Southern African American men dying younger but also, it is mainly due to preventable chronic diseases. Moreover, African Americans lower life expectancy can be seen as a result of their higher chronic disease rates (Mezuk et al., 2013; CDC, 2014). Thus, there is some aspect of their lived experience that is contributing to this higher decrease in lived years compared to their White male counterparts.

Obesity leads to an increased risk in chronic illness and other health conditions that highly affect premature mortality (CDC, 2011). Obesity can be seen as a proxy for food taken in versus energy expended via physical activity. Thus, high levels of unhealthy eating along with low levels of energy output (sedentary lifestyle) translate into higher levels of obesity. Obesity rates differ greatly by region as well as within region by race (Kelley et al., 2015). The highest rates of obesity are concentrated within Southern states, specifically among African American men (Flegal, 2010; Young, 2012). Furthermore, it is during middle age (30s-50s) that obesity rates increase to their highest levels, particularly within the African American population (Obesity Rates…, 2014). Thus, my main population of interest is Southern middle-aged African American men. As this population continues to die younger due to chronic illnesses- partially influenced by obesity-something must be done about obesity rates in the Southeast to combat these problems.

Specific Aims

This paper has three specific aims, (1) explain how stress is one potential determinant of health and how it contributes to obesity, chronic illness and premature mortality; (2) explain how socially-meaningful identities influence the lived experience and contribute to rates of obesity, chronic illness and premature mortality; and (3) discuss how to address stress related chronic diseases via interventions within families and communities. I will begin by discussing sources of stress and contributors to obesity within the context of the social and built environment. This will focus on how difficult it is to be healthy within Southern African American communities and what unique sources of stress middle-aged men within these communities experience. Finally, I will be using an individual perspective of identities and combine this with a sociological explanation of how these individual factors translate into institution differences. Finally, I will discuss the implications of these stressors for interventions to change the mesosystem (family/community) in African American men's lives with the objective of decreasing stress and contributors to obesity to improve health outcomes.

Methodology

A literature search was conducted to obtain studies that analyzed stressors and chronic disease risk experienced by Southern African American men by looking at the social and cultural context of living not only in the South but also as an African American. Additionally, obesity intervention programs for Southern African American men were analyzed to determine their current positive and negative attributes.

This literature search was done on JSTOR, ProQuest, and Medline using the search terms 'obesity', 'prevention', 'chronic illness', 'masculinity', 'men's health', 'intervention', 'urban', 'African American', and 'gendered health'. There were originally 47 articles that resulted from

this search. However, studies were only included if they met the following criteria: were published in a scientific or academic journal; explained the intersectional relationship between gender, race and stress with chronic illness/obesity or explained an intervention plan aimed at improving men's obesity rates (short-term or long-term). They also had to be focused on African American men (preferably Southern middle-aged men). Any studies that focused mainly concerned with children, women or people other than those classified as African American were excluded from the review.

In addition to the literature search on these databases, I took a class entitled "Men's Health Research" with Dr. Derek Griffith. With the help of this class, I gained access to useful articles and information that helped to achieve the aims set out for this paper. Finally, I also consulted with Dr. Griffith regarding additional books and articles that would be of use to this paper. Narrowing down the literature search, consulting with Dr. Griffith and participating in the Men's Health class tapered the final sample of articles used down to only 29 (14 from literature search and 15 from class/consulting with Dr. Griffith) (see Table 1).

Main Findings

This paper has two main findings, that first is that the stressors that Southern middle-aged African American men experience is due to the intersection of their identities, social context, and environment. The "intersectional approach is to simultaneously examine the social and health effects of several key aspects of identity and context in ways that create a new understanding of these factors and that are a more accurate reflection of the lived experiences of the populations of interest" (Griffith, 2012, p. 106). Intersectionality is the most important aspect of this paper due to its ability to define the uniqueness of the population in question (Southern middle-aged African American men). This approach becomes the main contribution this paper

has to offer to current research by explaining how regional norms interact with other identities held by men to influence their health status; therefore, this intersectional approach was used to determine what varied role identities Southern middle-age African American men have and how these identities influence their experienced stressors and contributors to obesity that then impact their health outcomes. It is their unique lived experience that, once understood, can lead to suggested improvements in intervention programs that allow for all of their experiences to be accounted for and not just some of them.

The second finding is that a mesosystem intervention approach can be used to improve the negative implications of these stressors and contributors to obesity. The minority status of 'African American' leads to a creation of both social and built environments that make it harder for its members to be healthy. Furthermore, the intersectionality of the various identities as a Southern, African American, middle-aged male creates many roles that these men must try to fulfill and balance. The balancing of these expectations becomes a major aspect of the lived experience. Thus, this balancing act can increase their stress and negatively affects their lifestyle in a way that contributes to obesity and chronic illness rates. Finally intervention programs must change to include aspects of implementation within the mesosystem to increase social support, create changes in access and ideologies around eating and exercising and should use religious leaders to aid in implementation.

Findings

Southern African American men experience determinants of obesity at different rates as well as experience different sources of stress than other groups within society. African American communities face an imbalance of positive and negative resources and have a different social structure than other communities, which can lead to increased access to opportunities for

unhealthy coping (Mezuk et al., 2013). Aside from how difficult it can be to live a healthy lifestyle as a Southern African American man, they also experience different rates and types of stressors due to their many identities.

The natural physiological implications of stress within the body can lead to an increase in weight. The experience of stress leads the body to increase the amount of cortisol released (Maglione-Garves et al., 2005). This increase in cortisol due to stress becomes harmful when it is a chronic issue; therefore chronic daily stress, i.e. role strain, leads to a constantly elevated level of cortisol within the body (Maglione-Garves et al., 2005). These constantly elevated cortisol levels lead to a development of fat, specifically within the abdominal area (Maglione-Garves et al., 2005). In addition to causing this natural weight gain, increased cortisol levels also increase appetite and sugar cravings (Maglione-Garves et al., 2005). Thus, individuals tend to eat more food, especially more unhealthy food, due to an increase in stress alone. When increase in weight due to elevated cortisol levels is coupled with an increase in negative coping mechanisms due this stress, the relation between stress and obesity can be more clearly seen. Therefore, understanding sources of stress and how to minimize them becomes a crucial part of obesity reduction.

Stress affects health through both this natural physiological response as well as through behavioral coping responses that can be unhealthy- such as poor eating, sedentary lifestyle, and alcohol and tobacco consumption (Mezuk et al., 2013). Increased stress due to racial discrimination, blocked economic opportunities, cultural ideology, Southern norms and masculine ideals leads to African American men using unhealthy but available strategies to cope with stress. Although negative coping responses can lead to decreased stress levels, when these behaviors become habitual, they can lead to chronic negative coping. These chronic negative

responses can contribute to increased obesity rates and other negative health outcomes. (See Figure 1)

Social and Built Environmental Characteristic of African American Communities

Southern African American men's lives within African American communities result in greater difficulty when trying to be healthy, eat healthily and engage in physical activity. This difficulty mainly id due to the social and build environment of these communities. The social environment consists of African American men's experience with their tenuous middle-class status and social ideologies held by the African American community (Williams, 2003). It is important to consider the social class of these Southern African American men in relation to what they can access since the stressors they experience are influenced by race, gender, age and SES (Bruce et al., 2015). Unlike middle-class White men, middle-class status for African American men provides them fewer benefits and is instead a very tenuous and marginal status (Williams, 2003). The middle-class status for African American men leads to higher levels of stress for many reasons (Williams, 2003). These middle-class men experience higher rates of unemployment, lower levels of wealth and worse housing than their middle-class White counterparts (Williams, 2003). Additionally, within African American men, increased education doesn't translate into higher income or increased life expectancy as it does for White men (Williams, 2003). Thus, this middle-class status lead to stress related with said status, but lacks the benefits other races tend to reap due to their increased social standing.

These barriers to healthy living are further exacerbated by different conceptualizations of health. African Americans were significantly less likely than Whites and Hispanics to view obesity as a health problem (Sivalingam et al., 2011). Additionally, dieting is seen as a very non-masculine activity and instead men tend to eat heavy meats and carbohydrates while shying away

from fresh fruits and vegetables (Nash & Phillipov, 2014, Coveney et al., 2004). Thus, while African American men experience larger barriers to living a healthy lifestyle, these barriers are not necessarily perceived as a negative since African American culture views obesogenic lifestyles in a less negative light than other races. Furthermore, overweight African American men are seen as more intelligent, competent, successful, masculine, and hardworking compared to normal weight African American men (Trautner et al., 2013).

In addition to the social environment of African American men, the built environment of the communities they live in greatly impacts their health status. Race-based residential segregation tends to lead to limited access to social and economic capital as well as mobility (Griffith et al., 2009). Within these racially segregated communities, members often experience lower paying jobs, worse schools, and higher availability of alcohol, tobacco and unhealthy foods (Griffith et al., 2009). These access inequalities lead to constrained choices, forcing men to compete for limited resources that impact their experience with stress (Rieker & Bird, 2005). All of these stressors can lead to unhealthy eating, engagement in unhealthy activities, and substance use as forms of coping mechanisms (Jack, 2009; Brodish et al., 2011). Furthermore, within their communities, men have less access to safe environments, which influences their access to physical activity and engagement in healthy social activities with their friends and family (Griffith et al., 2009; Souza & Ciclitira, 2005). Thus, Southern middle-class African American men experience inequalities in stress levels and access to positive resources that impacts the activities they engage in and their coping mechanisms. All of these social and built environmental attributes ultimately influence the health outcomes for these Southern middle-aged African American men.

Unique Stressors and Cultural Ideologies of Southern Middle-Aged African American Men

Being a Southern middle-aged African American man not only affects the social and built environment but also the norms this group must try to balance due to their many identities. Each of these identities comes with its own set of norms and implications for men's lives. As these identities and expectations build up, these men experience stress from trying to balance all the ideologies associated with being African American, Southern, middle class, and a man. This balance act can lead to high levels of stress due to the inability to properly maintain each of their identities successfully.

Gender and Age: Gendered ideals are closely tied to men's age and what priorities align with their stage of life. Middle-aged men (30s-50s) experience the provider role as the core of their masculine ideal (Bowman, 1990). Provider role strain is the idea that men strive to be the breadwinners and provide monetarily for themselves and their families which creates stress in their lives and psychological strain from the subjective and objective difficulty they face in seeking to fulfill these roles ((Bowman, 1989; Thompson & Walker, 1989). Even if both spouses are working, men are typically responsible for providing family provisions by working enough to contribute at least 70% of the family's income (Thompson & Walker, 1989; Jaramillo-Sierra & Allen, 2013).

Since middle age is associated with familial fulfillment, experiencing low paying jobs and chronic unemployment (common within African American communities as previously noted) can lead to role discouragement. This can lead to psychological stress/devastation and eventually substance and alcohol abuse, which can result in high levels of sugar and fat intake leading to increased weight (Bowman, 1990). Within this provider role, engaging as a father and spouse has been found to take precedence over engaging in physical activity, and thus health can

become a low priority (Griffith et al., 2011). African American men specifically find keeping their wives happy and preserving spousal division of roles as highly important and thus feel it is important to consider these relationships over choosing what they eat at home (Allen et al., 2012). Provider role strain can additionally lead to negative effects on family satisfaction in addition to stress, however significant previously held bonds within the family can also act as a buffering effect to this strain (Bowman, 1990). Therefore, having a strong social support system is crucial for men to maintain low stress levels, especially those associated with their gender and age.

Ethnicity: In addition to the role expectations created by age, race and gender, ethnicity plays a large role in African American men's cultural norms. African American culture has unique qualities that influence the priorities African American men must balance. African American masculinity holds "self-determinism and accountability, family, pride, spirituality and humanism" as very important. (Wade and Rochlen, 2012). These can be seen as positive cultural attributes that help to foster a community identity, which in stressful times can help to support the members of its community (Bowman, 1990). Therefore, the African American cultural norms help to inherently create larger social bases that can be mobilized if necessary.

Both racial inequalities and ethnic resources influence role strain barriers, which leads to both maladaptive and adaptive responses (Bowman, 1990). In an attempt to achieve respectable dimensions of masculinity via education, occupational attainment, and other barriers they often face stressors in an attempt to achieve success in these areas (Whitehead, 1997). Thus, men are faced with more stress in an effort to achieve culturally valued gendered roles. However, since African American men value success in these major life roles (family, worker) that align with the respectability dimension that they cannot fulfill due to lack of resources, they must often cope

with discouraging role barriers, repeated failure, and frustration (Bowman, 1990). All of this can lead to increased stress felt by middle-aged African American men, forcing them to cope not only with role strain but also life stress. (See Figure 2)

Southern African American Culture: While current research shows African American men have limited access to healthy eating and physical activity and abundant access to unhealthy resources, these do not explain why the Southeast region experiences higher rates of obesity and chronic illness. Next, I'm going to focus on what characteristics of the Southeast contribute to the stressors experience by African American men within this region and how they influence obesity. Southern African American culture is known for its production and consumption of soul food. Soul food was influenced by African cultures, slavery, racism and limited access to healthy foods based on the social, political and economic standing of African Americans in the South (Bailey, 2006). There is a perception within Southern African American culture that healthy foods are bland and include portions that are too small; eating healthy food may be seen as giving up a part of their culture and conforming to the dominant White culture around them (James, 2004). Therefore, African Americans may prioritize preserving this cultural aspect of soul food over the negative health effects they may experience from it (Bailey, 2006).

Soul food primarily consists of high sugar and salt, excess fat, high amount of starches, carbohydrates and meats and is typically heavily spiced and fried (Whitehead, 1992; Bailey, 2006). These foods are unhealthy and can contribute greatly to the increased obesity rates experienced within the South. However, this cultural underpinning not only influences obesity rates but also the built environment. Many Southern African American communities are plagued with restaurants and supermarkets that carry mainly unhealthy food items and lack fresh fruits and vegetables that are also an aspect of soul food (Whitehead, 1992). With dietary habits rooted

in both culture and community resources, these habits are generally formed early in life and members unconsciously participate in them in order to maintain their group identity (James, 2004). By examining each of the identities experienced by Southern African American middle-aged men, it becomes clear that the expectations of these all interact to create an intense role strain, especially within these racially segregated communities that experience highly unique stressors and lack of resources, all of which contribute to unhealthy eating and sedentary lifestyles.

Implications for Intervention

"Stressors that arise from one's unique position in social systems with unequal distributions of resources, opportunities, life chances, power, privilege, and prestige are best examined with an intersectional lens" (Griffith et al., 2013). Therefore, it is critical to understand how and why these identities matter. In many cases they can be seen as proxies for something else that is operating within the lives of people (Griffith et al., 2013). Generally, gender is a proxy for sources of stress, psychological strain/pressure, social norms; race is a proxy for environmental recourses, neighborhood context, and exposure to discrimination; ethnicity is a proxy for culture, traditions, and dietary habits; and age is a proxy for priorities (Griffith et al., 2013). The intersection of these identities leads to a unique impact on men's lives. For Southern middle-aged African American men, the stress experienced by the intersection of these identities leads to both increased stress and creates unique social implications. Both of these must be taken into account when creating effective intervention programs for this population.

There are many obesity intervention programs being implemented across the United States. While some of these prove effective and others do not, the majority of those being implemented do not focus mainly on African American men nor is there any long-term

effectiveness known regarding the intervention programs they are include in (Newton et al., 2014). Very few intervention programs take on the intersectional approach that I hope to achieve. This involves using the multiple identities that people have to create tailored programs that take these identities and norms into account. However, the way these programs should focus on changing the obesity and chronic illness rates via analyzing intersectionality of identities is hard to conceptualize.

Thus, while I realize there are many places to intervene, I'm going to focus on the family/community level- i.e. mesosystem. When looking at the ecological framework presented in Figure 3, the mesosystem can be understood as multiple interactions of an individual's various microsystems (McEathron & Beuhring, 2011). The microsystem is defined as activities and roles experienced when an individual interacts with someone else (McEathron & Beuhring, 2011). Thus, gender, race, ethnicity, age and region would all be defined as their own microsystems within an individual. They all independently present certain roles and activities that individuals engage in while in a social setting. However, since I am taking an intersectional approach, the mesosystem is the level that examines how these microsystems interact and impact the individuals lived experience (McEathron & Beuhring, 2011). Therefore, to implement intervention programs within the mesosystem, they must be implemented within families, peer groups and communities, as these are the setting that the interaction of microsystems occurs (McEathron & Beuhring, 2011). Therefore, by focusing on the mesosystem, some of the implications of the interaction of these roles (intersectionality) can be altered to improve access and limit stress, thus influencing obesity and chronic illness rates.

Intervention programs should try to incorporate the four following mesosystem approaches. First, since this group of men must manage many different identity role norms, it is

important to provide or strengthen the positive support they have, which will help them combat role strain and role discouragement. Men's family, peer and community norms/expectations can both negatively and positively affect their health behavior and stress responses (Creighton & Olffie, 2014). Therefore, interventions should work to increase the positive attributes of the mesosystem and decrease the negative ones. Men's mesosystems play a key role in shaping their gender identities (Creighton & Olffie, 2012). Thus, by intervening here, the entire community can alter, creating changes in the shaping of the identities themselves, even possibly allowing them to be more flexible in the expectations generated.

Additionally, men have both fewer and less intimate friendships than women do (Courtenay, 2003). Therefore, in times of stress, men are able to mobilize less social support and experience greater social isolation, which can have impacts on not just stress levels but also health outcomes (less changes of survival after cancer and heart disease) (Courtenay, 2003). Thus, by increasing social support, men can better engage in healthy coping methods, which can minimize their stress as well as provide an alternative to unhealthy coping responses. Both of which, lead to improved health outcomes. Increasing social support networks has been shown to help men diet more effectively as well as make better dietary choices (Souza & Ciclitira, 2005; Wickrama et al., 2012). Therefore, by increasing the perceived and actual social support men have, their health outcomes can be greatly improved.

In addition to improving social support, bettering men's eating and physical activity behaviors are crucial in decreasing obesity rates. "Interventions to improve married African American men's eating behaviors need to explicitly consider that men may prioritize marital harmony and the preservation of spousal food roles over their tastes, preferences, and desired food decision making roles" (Allen et al., 2012, p. 1). Therefore, nutritional education programs

must target extended families, especially women since they often are responsible for the purchasing and preparing of foods (James, 2004; Nash & Phillipov, 2014, Coveney et al., 2004). However, since soul food is a form of cultural preservation, providing healthier option of this type of food would be more effective than trying to change entire eating habits. Thus, targeting local grocery stores, farmer markets and soul food restaurants as a form of community partnership can create changes that result in providing healthier forms of soul food (James, 2004). This will allow Southern African American communities to preserve their culture while ultimately improving their dietary habits.

Likewise, to improve physical activity within men, it must be integrated in a way that falls within the roles of men's daily lives (Griffith et al., 2011). This may mean changing cultural and societal norms to allow for engagement in physical activity to align with fulfillment of their provider role (Griffith et al., 2011). Additionally, increasing access to physical activity in African American communities, which generally lack these safe spaces, is key to improving engagement in such activity.

Finally, implementation of a program can be challenging if it doesn't align with the attitude and beliefs of the community and in turn, they do not buy into it. Religion and spirituality are of high importance within Southern African American culture (Taylor et al., 2009). Therefore, using the leader of churches to achieve implementation of program and to promote key aspects of programs can be very effective (Taylor et al., 2009). Larger changes to community and cultural norms can be achieved if trusted members of the community are used to spread the message as opposed to outsiders. All in all, intervention programs must change to focus on implementation within the mesosystem to increase social support, create changes in

access and ideologies around eating and exercising and should use religious leaders to aid in implementation.

Conclusion

As the rates of obesity, chronic illness, and premature mortality for Southern middle-aged African American men continue to remain high, an understanding of the unique stressors and influences for this group need closer examination. By examining racial, ethnic, gender, age and regional norms through an intersectional lens, the role strain experienced by this group of men can be better understood as it relates to increased stress, obesity and chronic illness rates. Using this intersectional approach is one way to improve mesosystem interventions in order to decrease these rates. The South has its own culture and context; in many cases the social and built environments do not support healthy eating or physical activity. Within the South, African Americans experience their own culture and built environment. This built environment is highly influenced by race-based residential segregation, leading most of these communities to be very obesogenic environments. In addition to these environments, African American culture supports the use of unhealthy food and inactivity as a means of coping to stressors. Mezuk et al.'s (2013) model helps to explain how part of the reason Southern African Americans cope in this manner is because this is what their environment affords them availability to do.

Since the built environment is such a major part of coping with stressor, both environment and stressors must be taken into account when developing intervention programs. There is a need to not only reduce stress levels but also help people become healthier in an unhealthy environment. Within this Southern African American male population, there are different positive priorities and roles that come with different ages. Southern African American families and communities have certain expectations of middle-aged men that create further role

strain. These men are trying to fulfill multiple roles and ideologies but the effort they are putting forth to do so are the same efforts that are creating the biggest barriers to living a healthy lifestyle. Mainly, men are investing time into maintaining their various identities and lack of time becomes a large barrier to engaging in physical activity.

Finally, since the Southern African American families and communities are the basis of where role strain occurs and help to normalize many of the unhealthy behaviors that people engage in, they must be the main focus of intervention programs. There is a need for interventions that think about managing the stress from the community setting, as well as increasing access to healthy eating and physical activity within the low-resource communities Southern African American men live in. Once all of this can be achieved, successful programs can aid in decreasing stress, obesity and premature mortality due to chronic illnesses.

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Table 1- Articles Used for Literature Analysis

Article/Book Name	Author(s)
1. “She looks out for the meals, period”: African American men's perceptions of how their wives influence their eating behavior and dietary health	Allen, J. O., Griffith, D. M., & Gaines, H. C.
2. *Food Choice and Obesity in Black America: Creating a New Cultural Diet*	Bailey, E. J.
3. Coping with Provider Role Strain: Adaptive Cultural Resources among Black Husband-Fathers	Bowman, P.J.
4. Perceived Racial Discrimination as a Predictor of Health Behaviors: the Moderating Role of Gender	Brodish, A. B., Cogburn, C. D., Fuller-rowell, T. E., Peck, S., Malanchuk, O., & Eccles, J. S.
5. Stress and the Kidney	Bruce, M. A., Griffith, D. M., Thorpe Jr., R. J.
6. Key determinants of the health and well-being of men and boys	Courtenay, W. H.
7. I’m not dieting, “I”m doing it for science’: Masculinities and the experience of dieting	Coveney, J., Holmes, M., Mallyon, A., & Zadoroznyj, M.
8. An intersectional approach to men's health	Griffith, D. M.
9. Male gender role strain as a barrier to African American men’s physical activity	Griffith, D. M., Gunter, K., & Allen, J. O.
10. Measuring masculinity in research on men of color: findings and future directions	Griffith, D. M., Gunter, K., & Watkins, D. C.
11. Implications of Racism for Black Americans' Diabetes Management and Outcomes.	Griffith, D. M., Schultz, A. J., Johnson, J. L., Ellis, K.
12. Geography, Race/Ethnicity, and Obesity Among Men in the United States	Kelley, E. A., Bowie, J. V., Griffith, D. M., Bruce, M., Hill, S., & Thorpe, R. J.
13. Who pays after the first date? Young men’s discourses of the male-provider role	Jaramillo-Sierra, A. L., & Allen, K. R.
14. "White Box" Epidemiology and the Social Neuroscience of Health Behaviors: The Environmental Affordances Model	Mezuk, B., Abdou, C., Hudson, D., Kershaw, K., Rafferty, J., Lee, H., & Jackson, J.
15. Introduction to the special issue: Eating like a “man”: Food and the performance and regulation of masculinities	Nash, M., & Phillipov, M.
16. Rethinking gender differences in health: why we need to integrate social and biological perspectives	Rieker, P. P., & Bird, C. E.
17. Ethnic Differences in the Self-Recognition of Obesity and Obesity-Related Comorbidities: A Cross-Sectional Analysis	Sivalingam, S. K., Ashraf, J., Vallurupalli, N., Friderici, J., Cook, J., & Rothberg, M. B.
18. Men and Dieting: A Qualitative Analysis	Souza, P. de, & Ciclitira, K. E.

19. Church-Based Health Promotion to Address Chronic Diseases among African American	Taylor, C., Langley, M., Jack, L.
20. Gender in Families: Women and Men in Marriage, Work, and Parenthood	Thompson, L., & Walker, A. J.
21. Masculinity, Competence, and Health The Influence of Weight and Race on Social Perceptions of Men	Trautner, M. N., Kwan, S., & Savage, S. V.
22. Introduction: Masculinity, identity, and the health and well-being of African American men	Wade, J., & Rochlen, A.
23. "In Search of Soul Food and Meaning: Culture, Food, and Health." *African Americans in the South: Issues of Race, Class, and Gender*.	Whitehead, T. L.
24. Life dissatisfaction and eating behaviors among older African Americans: The protective role of social support	Wickrama, K. A. S., Ralston, P. A., O'Neal, C. W., Ilich, J. Z., Harris, C. M., Coccia, C., … Lemacks, J.
25. The health of men: structured inequalities and opportunities	Williams, D. R.
26. *Predictors of Obesity in Adults: The Roles of Demographic Factors, Body Dissatisfaction, Depression, and Life Stress*	Young, D. A.
27. Theorizing masculinities and men's health: a brief history with a view to practice	Creighton, G. & Oliffe, J.L.
28. Urban Low-Income African American Men, HIV/AIDS, and Gender Identity	Whitehead, T. L.
29. A systematic review of weight loss, physical activity and dietary interventions involving African American men	Newton, R. L., Griffith, D. M., Kearney, W. B., & Bennett, G. G.

Figure 1- Environmental Affordances Model (Mezuk et al., 2013)

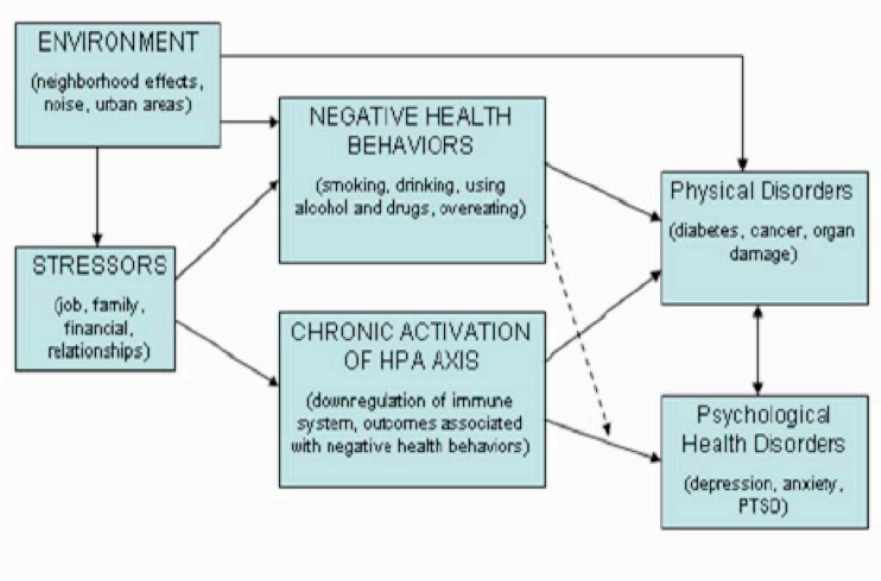

Figure 2- Role Strain and Adaptation Model (Bowman, 1990)

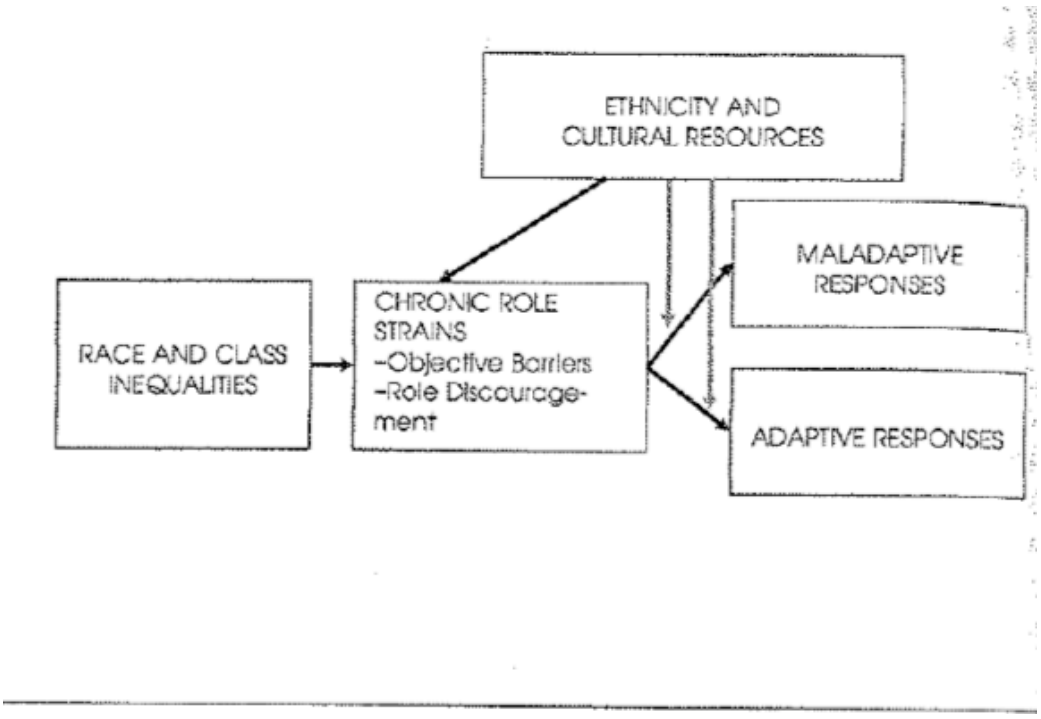

Figure 3- Ecological Framework (McEathron & Beuhring, 2011)