



*Scientia et Humanitas:*  
*A Journal of Student Research*

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## Letter from the Editor

As Middle Tennessee State University celebrates its first 100 years, it is truly an exciting time to be here as a student. From humble beginnings, MTSU has grown into one of the largest and most important academic institutions in the state and region.

Because of this, we are excited to publish the inaugural issue of *Scientia et Humanitas: A Journal of Student Research*. It serves to highlight some of the wide spectrum of demanding research and scholarship being conducted by students here.

As managing editor, I have seen the journal grow over the last year from little more than a name and a good idea into the publication you see here. This would not have been possible without the hard work and persistence of the entire staff. Not only have they done exceptional jobs as editors and reviewers, often on very short notice, but they have been tireless advocates and spokespeople for our publication. In short, their hard work has enabled us to make *Scientia et Humanitas* a reality, and it would not be so without each one of them. Thank you for your dedication, for your patience, and for your belief in me and in the journal itself. A special thanks to Production Editor Lindsay Gates; the task, quite frankly, seemed impossible, and would have been, if not for the many hours of hard work you put in.

I would also like to thank Dean Vile for his support, his guidance, and for taking a leap of faith that we could bring this publication to fruition. And last but not most certainly not least, Marsha Powers, whose relentless patience, optimism, and unshakeable belief in *Scientia et Humanitas* are at the foundation of its success. I could not have learned to do this job without you.

And so, in the centennial year of Middle Tennessee State University, we present *Scientia et Humanitas: A Journal of Student Research*. It is my hope that, in the university's next century, the journal will grow to become a showcase of MTSU academics, of the diversity and scholarship of students here, and an ambassador of the university itself.

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## Introduction to Inaugural Issue of *Scientia et Humanitas*

I am pleased to introduce this volume that features research from undergraduate students at Middle Tennessee State University. Although the length of this issue is relatively modest, it represents considerable time and effort on behalf of student contributors, student editors, and our Director of Publications, who already takes primary responsibility for our newsletter the *Honors Edition* and for our Literary Magazine *Collage*. With these publications in mind, I would be inclined to say that this is the third leg of a three-legged honors publication stool, except for the fact that this year the Honors College has also metaphorically worked on yet a fourth leg by sponsoring the publication of a book of poetry entitled *Time and Tradition*, in anticipation of Middle Tennessee State University's Centennial.

MTSU has been offering honors classes since 1973. The once fledgling program has now become a College with its own building and bell tower, and -- dare I say it?-- its own dean. It now boasts more than 750 students, an increasing number of whom are receiving national recognitions, in a variety of majors and minors.

With his own education at the College of William and Mary in mind, Thomas Jefferson once said that the best education he could think of was a professor (biologist William Small) at one end of a log conversing with a student at the other. Although the Honors College boasts many advantages, including prestigious scholarships, the heart of the College consists of the interaction of the best students and the best professors that MTSU has to offer in small classes. Honors classes are not designed to be more difficult, but they are intended to develop higher-level thinking skills, which are particularly important for the majority of our students who go to graduate or professional schools. I have always found that research and writing are two essential components of higher-level learning and two of the most important skills that students can cultivate, regardless of their majors. The capstone of the Honors experience is, of course, an honors thesis, and while some theses are creative, all have a written dimension which are commemorated in bound copies in our Honors Library.

While students rightly revel in the achievement of writing and defending such a thesis, the Honors College is increasingly encouraging students to take the next step by seeking a larger scholarly audience than the one that typically sits in on an honors defense. Just as students who write masters theses and honors dissertations are encouraged to publish their findings in scholarly journals, so too we encourage students to disseminate their own findings in similar outlets.

We view *Scientia et Humanitas* as one means for doing this. It proudly takes its place alongside the *McNair Research Review*, which serves a similar purpose on behalf of undergraduate students enrolled in the McNair Program. Some observers will see further continuity between *Scientia et Humanitas* and a previous on-line journal simply called *Scientia*, which was started by Dr. Phil Mathis and continued by Dr. John Dubois and

housed in the College of Basic and Applied Sciences. Whereas that journal was limited to publications in the natural sciences, this newly-titled journal is open to contributors not only from this area but also from the social sciences and the humanities.

We encourage students from all disciplines to consider submitting future contributions to this journal or joining the editorial board.

*Dr. John R. Vile, Dean  
University Honors College*

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# **Contact Hypothesis in Context: Household Characteristics, Community Perception, and Racial/Ethnic Prejudice in the U.S.**

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## **Abstract**

*Although overt racism has diminished, there remain vast racial and ethnic disparities in the United States. Many households are isolated from these disparities simply by where they live. Contact theory hypothesizes that under certain conditions, individual contact with minorities can decrease prejudice. Using a nationally representative sample from the 2000 General Social Survey, this paper explores contact, residential segregation, and anti-minority prejudice in American households. We employ linear regression techniques to analyze the characteristics of White respondents in White households by perception of community composition, region, city size, education, and household type, to identify prejudice against minority groups. Results indicate strong regional effects, with higher levels of prejudice in the South when compared to other regions. Anti-Hispanic prejudice is higher in the Northeast than in the South. Contact theory is not supported, except to show that the effect of more contact is greater on anti-Black prejudice in the Northeast than in the South. Following prior research, education was associated with lower prejudice, and age exhibited a positive relationship with prejudice. We also discuss the general implications of our findings.*

## INTRODUCTION

The twenty-first century is a time of nearly unprecedented diversity when it comes to race and ethnicity in the United States (e.g., Larsen, 2004; McKinnon, 2003; Ramirez & de la Cruz, 2002; Reeves & Bennett, 2003). As Jeffrey Dixon (2006) succinctly notes, “if the problem of the 20th century was that of the color line, then the problem of the 21st century is that of increasingly numerous color lines.” As a result, the character and quality of interactions among various racial and ethnic groups are of particular interest to sociologists. Current demographic trends permit continued development in the area of social theory, but perhaps more importantly, there is also the opportunity to peer more deeply into important racial/ethnic issues facing us today, like immigration, prejudice, and many others. Social science research emphasizes two contrasting theoretical backgrounds in analyzing the relationship between racial/ethnic composition and prejudice (Ulrich et al., 2006). The first deals with social contact (see Allport, 1954), while the second focuses on threat effects (see Blalock, 1957). Previous findings offer evidence both in support and in critique of these frameworks (see Dixon, 2006), but more recent analyses (e.g., Crisp & Turner, 2009; Pettigrew & Tropp, 2008) focus current research efforts more and more upon the idea of social contact and its effects upon phenomena like prejudice and racism.

This paper investigates racial- and ethnic-based prejudices in non-Hispanic White households, and examines the ways that contact with minorities affects prejudice in the United States. Specifically, this research looks to disentangle prejudice against Blacks, Hispanics, and Asians from the characteristics of residential segregation. While much research focuses on institutional discrimination, and prior research has shown that overt racism is in decline, the racial and ethnic disparities existing within the United States warrant further exploration (Johnson & Jacobson, 2005). In addition, the recent election of the first African-American president in the U.S. has renewed public interest in race and has increased race and ethnic dialog in media outlets. Immediately after the election of President Barack Obama, a Gallup poll found that 67% of Americans thought that a solution to relations between Blacks and Whites would eventually be worked out. This was the highest percentage Gallup has measured on that particular question (Gallup, 2008).

While that is certainly positive news, we cannot so quickly dismiss the past or disregard the current situations of minorities in the U.S. In the 1950s, “White flight” allowed Whites to flee urban neighborhoods, leaving behind Blacks who did not have the same opportunities or life chances, thus increasing segregation. Trends show that the Black middle-class has recently increased in size, and although many of its members remain in the central city, some have begun moving into the suburbs. However, this does not necessarily translate into equality. Research also indicates that Blacks, even if they are in the middle-class, still tend to live in poorer neighborhoods than their White counterparts (Logan, 2002). Hispanic populations are rapidly expanding as well, along with Hispanic presence within many communities. The Pew Hispanic Center (2009) reports that the Hispanic populations of the United States (native- and foreign-born) represent fifty percent of the increase in population from 2000 to 2007. Little research has investigated the effects of White non-

Hispanic and Hispanic prejudice or contact (Weaver, 2007). Asians, on the other hand, are considered a 'model minority' and experience higher levels of integration within American society (Gans, 1999). Is there a basis for anti-minority prejudice in White households, since there is such a high level of residential segregation in the United States? And is prejudice mediated by the perception of a higher level of minority presence by the respondent within his or her community? These are questions of particular interest in this research.

This study evaluates the assumptions and propositions of contact theory by looking at selected characteristics of non-Hispanic White households in the United States (e.g., region, city size, family income, household type, and perception of community racial/ethnic composition) to identify relationships between these characteristics and prejudice. Anti-Black, anti-Hispanic, and anti-Asian prejudice are analyzed separately for a more comprehensive study. This research seeks to uncover the extent to which anti-minority prejudice still exists among Whites, and if the perception of community racial/ethnic composition affects that prejudice in any observable way. The research conducted here is important because we have not yet clarified the causes and correlates of residential segregation in U.S. society. Doing so could feasibly inform future economic and social policies capable of addressing the causes persistent forms of residential segregation and prejudice.

## **CONTACT AND RESIDENTIAL SEGREGATION**

In considering solutions to racial/ethnic prejudice, Allport (1954) hypothesizes that on an individual level, meaningful contact with another individual of a different race or ethnic group decreases prejudiced attitudes, further specifying that so-called 'meaningful contact' exhibits specific characteristics that must exist for the reduction in prejudice to occur. As Johnson and Jacobson (2005:388) explain, positive outcomes to social contact occur only (1) in cooperative events, (2) among participants of equal status, (3) between those who hold common goals, and (4) with those who have supportive authority. Allport's contact hypothesis has since been widely tested and is now recognized as a theory (Pettigrew, 2008). However, is contact theory based on individuals without prejudice having more contact with minority individuals? Pettigrew (2008), in a review of the literature, claims that this is not the case.

As for residential segregation, Allport (1954:263) notes that, "Where segregation is the custom, contacts are casual, or else firmly frozen into superordinate-subordinate relationships." This is negative contact, and the vast inequalities that exist as a result of dilapidated and segregated minority neighborhoods begin to appear as characteristics of that particular race (Allport, 1954). However, while Whites may be highly segregated at their residences, it follows that contact will become more and more unavoidable as minority populations continue to expand.

It is easy to point to the Civil Rights Movement or the Fair Housing Act as indications of dismantling segregation. However, these very public actions did not solve covert discrimination and racism (Massey & Denton, 1993) and residential segregation persists.

Recent and previous studies (e.g., Clark & Blue, 2004; Freeman, 2008; Massey & Denton, 1993) emphasize economic status and interpersonal or institutional discrimination in explaining the persistent gap between White and minority neighborhoods. The economic explanation is perhaps the most straightforward: Blacks and Whites differ, on average, in both income and wealth, with Blacks falling behind some in the former and even more in the latter (Oliver & Shapiro, 1997). Whites, it follows, can afford higher quality housing, which is coincidentally located in different neighborhoods than housing that is financially available to Blacks. According to the spatial assimilation model, this condition should be temporary; as racial and ethnic minorities increase their levels of education, occupational prestige, and income, integration should follow (Charles, 2003). For example, Asians have been better able to assimilate into American society, presumably because of their higher education levels (Gans, 1999).

The place stratification model, on the other hand, more fully considers the effects of institutional discrimination, emphasizing the “persistence of prejudice and discrimination – key aspects of inter-group relations – that act to constrain the residential mobility options of disadvantaged groups, including supra-individual, institutional-level forces” (Charles, 2003:3). In the past, this included ‘redlining’ throughout the United States (Wilson, 2008), or selecting out primarily Black neighborhoods from any mortgage, regardless of the socioeconomic status of the individual or family. Through government programs initiated after World War II, Whites were encouraged to move out into the suburbs and buy homes, leaving dilapidated urban areas behind (Massey & Denton, 1993). Institutional discrimination also affects housing searches, encouraging Blacks to settle or stay in predominantly Black neighborhoods even if they could afford to move into the White suburbs (Gans, 1991; Lake, 1981; Williams & Williams-Morris, 2000). Indeed, Logan (2002) analyzes 2000 decennial census data and uncovers a neighborhood gap between Black and Hispanic minorities and Whites. As Whites earn more money, they move to neighborhoods that correspond with their income. In 2000, the average White household with an income of \$60,000 or more lived in a neighborhood where the median income was above \$64,000. However, the average Black and Hispanic household with an income of \$60,000 or more lived in neighborhoods where the median income was below \$50,000 (Logan, 2002:4). This same trend follows in the South, with the average White household earning \$60,000 or more living in a neighborhood where the median income was \$52,000 and the average Black household living in a neighborhood where the median income was \$41,918.

Based on these data, Logan (2002:7) concludes that this gap is “not merely a reflection of income differences between the races. Comparable Whites and Blacks face a very different structure of opportunities about where to live, yielding considerable advantage to Whites.” This is not the result of Blacks’ preference to stay in their familiar poor and segregated neighborhoods. Like other racial and ethnic groups, African Americans aim to pair social and geographic mobility, moving to better neighborhoods as they become

financially able, but they are nonetheless more likely to stay in poorer areas (Patillo-McCoy, 1999:23).

As Quillian (2002) summarizes, income differentials and institutional discrimination do not fully account for contemporary levels of segregation in the United States. This and other research (e.g., Clark, 1991; Krysan, 2002; Zubrinsky & Bobo, 1996) turns our attention to preferences, or the way that personal desires (particularly the desire to live near neighbors who are of the same or a different racial and ethnic background) shape choices of home and neighborhood. These preferences are measured in diverse ways, both directly – asking respondents about their willingness to buy in real or hypothetical neighborhoods of varying racial compositions – or indirectly, by modeling moves to and from neighborhoods with varied racial compositions, and inferring preferences as motives behind these moves. This latter line of inquiry documents actual patterns of White flight, linking them with neighborhood composition. For example, Quillian (2002) shows that as the number of Blacks in a census tract rises, Whites' probability of moving to a different census tract increases, as does probability of moving to a different type of tract – one with fewer Black residents. “Whites move to neighborhoods that are Whiter than their origin and are by far most likely to move to the Whitest possible destinations. This is consistent with concerted efforts by Whites to avoid Black neighbors” (Quillian, 2002:212). In a similar study, Crowder (2000) finds that regardless of other individual- and neighborhood-level predictors of mobility, Whites living in minority neighborhoods are more likely to move out than those in Whiter areas. The availability of White destination tracts has a positive and significant effect on Whites' probability of moving, as does the presence of recently constructed housing. Although this research suggests that Blacks *prefer* to live in racially-mixed and upwardly mobile neighborhoods, the racial composition of their current neighborhood influences the likelihood of moving and reflects movement toward racial homogeneity. In other words, Black residents are most likely to switch census tracts if they are in predominantly White areas, often moving to blacker neighborhoods (Quillian, 2002; Zubrinsky & Bobo, 1996). Since the findings on preference point away from racial homogeneity, there are likely other factors preventing racially diverse neighborhoods.

While these studies focus on mobility patterns, they offer little insight into the perception of race itself. Race is not just a factor in the perception of a particular community, it is also a factor in Blacks' and Whites' awareness that a community exists. Asking about communities in several metropolitan areas (of varying social, economic, and racial composition), Krysan (2002) found that Blacks consistently classified each community as more desirable than did White respondents. However, when Black respondents had information on a possible negative racial climate of the area (for example, Whites discriminating or acting out against Black neighbors), the desirability changed. Black respondents were also less likely to know about neighborhoods that were further away from the core of the metropolitan area than Whites, suggesting that “housing searches for Blacks may be biased away from suburban-whiter- communities about which they have less knowledge; Whites' housing searches may be biased away from racially mixed communities, in part, for the same reason” (Krysan,

2002:526). Furthermore, Blacks may assume that predominantly White areas about which they have little other knowledge are more racist, leading them to prefer more mixed neighborhoods (Krysan, 2002:537). Whether or not areas have explicitly racist histories or local cultures, middle class Blacks often experience both overt and subtle discrimination in predominantly White neighborhoods (Feagin, 1991), and some may prefer more mixed areas for this reason. Overt discrimination may include such clear discriminatory acts as prejudiced comments, while subtle discrimination may include avoidance or exclusion from neighborhood activities.

Given the research on continuing forms of discrimination and residential segregation, are Whites' preferences rooted in racism, or based on the correlations between neighborhood racial composition and property values, crime, or school quality? Is the avoidance of Black neighbors simply a reflection of the desire to avoid the problems associated with poor neighborhoods of color? Emerson, Yancey, and Chai (2001) investigate these factors by presenting respondents with a hypothetical ideal house, and controlling for factors including school quality, crime, housing values, and racial composition. The first three variables were always strong predictors of the willingness to buy the home, but as far as racial composition of neighborhood (which was presented as proportionately White and one other racial group), only the presence of Black residents impacted the respondents' willingness to buy. The likelihood to purchase declined at all levels of Black population, particularly for respondents who had minor children. Race, it seems, does shape housing preferences, in both the kinds of preferences held by racially differentiated groups and the types of neighborhoods that individuals prefer. This research suggests that Blacks may still experience discrimination among those who live in a segregated neighborhood. Within suburban neighborhoods, we see trends toward gated communities that separate these residents from surrounding areas. These communities cater to families and offer amenities geared toward households with children. The areas surrounding these communities have also refused public housing, further insulating themselves from urban problems and surrounding themselves with wealth and prestige (Jackson, 2000). On the other hand, Carter et al. (2005) found that city residents have more tolerant views toward Blacks than non-city residents. When they measured views by region, they also found that Southerners were less likely to be tolerant of Blacks. This discrimination could be rooted in prejudice, but the current analysis aims to disentangle prejudice from the other previously mentioned causes of residential segregation.

## **RACIAL AND ETHNIC PREJUDICE**

This study follows the definition of prejudice provided by Jeffrey Dixon (2006), and used in his prejudice index, which includes a combination of the traditional meaning and elements dealing with the emergence of *laissez-faire* racism. "Prejudice has traditionally been defined as 'an antipathy based upon a faulty and inflexible generalization.'" It has also come to include the feelings that "a minority group is inferior, different, alien and threatening to one's own racial/ethnic group" (Dixon, 2006:2180). However, research indicates that overt



racism (called Jim Crow racism, based on the post-Civil War South) has declined because it goes against American values (Bobo, Kleugal & Smith, 1997). Rather, a new racism, termed 'laissez faire,' has emerged. Bobo et al. (1997) distinguish this racism from other types in that it removes social responsibility from the continued economic disadvantages for Blacks, including residential segregation. "In short, a large number of White Americans have become comfortable with as much racial inequality and segregation as a putatively nondiscriminatory polity and free market economy can produce: hence the reproduction and, on some dimensions, worsening of racial inequalities" (Bobo et al., 1997:41).

Laissez-faire racism lends itself well to the prejudice index, as it measures attitudes toward qualities Whites might believe Blacks or other minority groups to possess as the reasoning behind their lack of economic mobility (e.g., laziness). While residential segregation is primarily focused on the White/Black dichotomy, other research suggests that Whites flee neighborhoods when any minority group representation increases (Crowder, 2000:226). Gans (1999) presents the possibility of a new racial hierarchy, which adds a third category that does not fit into the Black/non-Black dichotomy that exists today. One of the first minority groups who seemingly have been able to assimilate into the non-Black dichotomy includes part of the Asian and Asian-American population. Gans (1999:267) terms this group the "model minority," as they have been able to "eradicate many of the boundaries between it and Whites." It remains to be seen what will occur with the Hispanic population, as some groups within the Hispanic ethnicity are able to 'pass' as non-Black, while others have darker skin color that could be labeled as Black. Hence, there is a need to include Asian and Hispanic prejudice in the current study.

Prior research on prejudice suggests that while Whites may not have completely negative attitudes toward Blacks, it does not follow that they necessarily have positive attitudes (Federico, 2006:345). For example, a White person may not be completely prejudiced against a Black person, or hold entirely prejudiced attitudes towards Black people, but that does not mean that no prejudice exists. Therefore, questions that ask respondents to make a choice strictly between positive and negative prejudice may be missing a chance to delve deeper into the issue. Conversely, this research relies on a scale, which takes this point into consideration. Another previous study (Carter et al., 2005) indicates that two types of modules are needed to fully test for prejudice. The first should contain questions based on principles which literally assess a person's principles or beliefs regarding race and equality. The second module should contain questions on implementation, which typically involve feelings on government interaction with minority groups. This includes questions regarding support for affirmative action or enforcement of equal opportunity housing laws. Our study contains questions regarding principle, since implementation questions were not asked on this particular topic in the 2000 General Social Survey.

## DATA AND METHODS

The data for this study comes from the 2000 National Opinion Research Center's General Social Survey (GSS). GSS samples are nationally representative of English-speaking persons eighteen years of age or over living in non-institutional households in the United States (see Davis & Smith, 1992). Respondents for the 2000 survey were chosen using probability sampling, and the survey was administered to 2,817 respondents. Only a portion of the questions used to create the prejudice index were asked of a subset of the full sample, so we removed all cases that were not asked each question, as well as those not asked about prejudice. We then selected White respondents from White households and adjusted our sample for missing cases. This left a total of 789 cases analyzed for anti-Black prejudice, 774 cases for anti-Hispanic prejudice, and 770 cases for anti-Asian prejudice.

### *Hypotheses*

Previous research (e.g., Clark, 1991; Krysan, 2002; Zubrinsky & Bobo, 1996) into the White flight phenomenon explores residential preferences and current and/or previous neighborhood racial composition, but has failed to look at the characteristics of households and their relationship to racial and ethnic group prejudice. This analysis investigates the relationship between characteristics of non-Asian and non-Hispanic Whites in White households and perceptions of racial/ethnic community composition with racial and ethnic group-based prejudices, and what role contact plays. The characteristics measured here include: 1) region, 2) household type, 3) city size, 4) education of the respondent and 5) family income of the respondent, and we specifically examine White respondents' anti-Black, anti-Hispanic, and anti-Asian prejudice.

We first hypothesize that White respondents in Southern White households have higher levels of anti-Black, anti-Hispanic, and anti-Asian prejudice than households in the Northeast, Midwest, and West. This is based on previous research (e.g., Crowder, 2000) indicating that White flight occurs more prominently in the South. It also follows evidence of historical racism in this region, and Carter et al.'s (2005) findings of more racist attitudes among southerners.

H<sub>1</sub>: White respondents in White households in the South will have higher levels of anti-Black, anti-Hispanic, and anti-Asian prejudice, compared to households in other regions.

Following the propositions of contact theory (Allport, 1954), we next hypothesize that lower levels of racial/ethnic presence within the community are associated with higher levels of racial/ethnic prejudice net of all household characteristics.

H<sub>2</sub>: As perceived levels of racial/ethnic presence increase, anti-Black, anti-Hispanic, and anti-Asian prejudice will decrease.

Due to the importance of the variable used to test contact theory and the preliminary results showing highly significant results by region, we also test for interaction effects. Since



contact theory is grounded in place, we examine interaction between variables representing place (i.e., region) and community composition. We hypothesize that prejudice is explained by the interaction of perception of community composition by race and the region where they live.

H<sub>3</sub>: The effect of perceived levels of racial/ethnic presence on anti-Black, anti-Hispanic, and anti-Asian prejudice will vary by region.

We next posit that households with children exhibit higher levels of prejudice than households without children. This is based on the characterization that families participate in White flight, and as Jackson (2000) explains, communities located in White suburbs are geared toward households with children. In addition, Emerson et al. (2001) report that Whites with children are more likely to decline purchase of a home within a neighborhood at any level of Black population. Therefore, it follows that individuals with children would be more likely report prejudice and to flee neighborhoods that have a large minority population.

H<sub>4</sub>: White respondents with children in White households will have higher levels of anti-Black, anti-Hispanic, and anti-Asian prejudice, compared to households without children.

Because White flight occurs toward the suburbs (e.g., Crowder, 2000), we next hypothesize that White respondents in suburban households exhibit greater prejudice than those in city or rural areas. Blacks have not relocated to the suburbs at the rate of Whites either due to racial factors or institutional discrimination (Logan, 2002). Since these neighborhoods tend toward more homogeneity, perhaps the White residents of suburbs exhibit higher levels of prejudice against minorities.

H<sub>5</sub>: White respondents in suburban White households will have higher levels of anti-Black, anti-Hispanic, and anti-Asian prejudice, compared to households in urban areas.

Finally, because white flight is typically a middle-class phenomenon, prejudice should decrease as education and family income increases. While White neighborhoods tend to have higher education and family income levels than minority neighborhoods (Logan, 2002), the more educated persons are, perhaps the less prejudiced they are as well.

H<sub>6</sub>: As education and family income of White respondents in White households increase, anti-Black, anti-Hispanic, and anti-Asian prejudice will decrease.

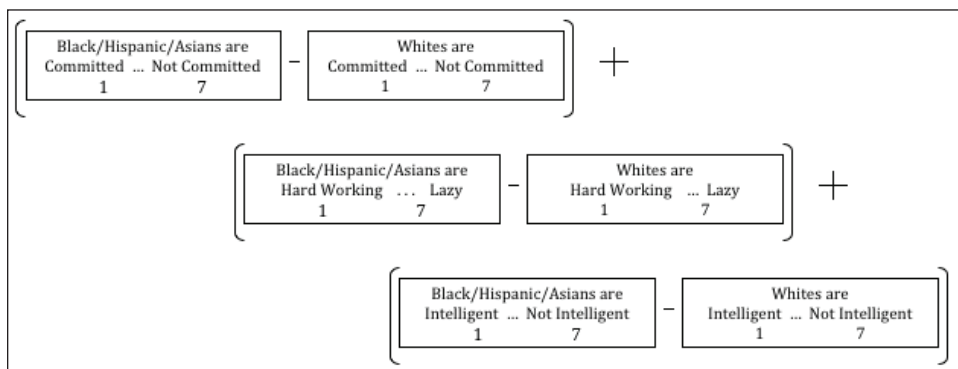
In summary, this study tests the idea that education, household type, city size, region, and perception of community composition among White respondents in White households influence the degree to which Whites hold anti-Black, anti-Hispanic, and anti-Asian attitudes.

**Dependent Variables**

Dependent variables are based on the prejudice index developed by Jeffrey Dixon (2006). Rather than ask a strict yes or no question on prejudice, the index is based on scaled questions, which permits a deeper look into the issue of prejudice. A scale allows the respondent to provide an answer within a range of responses, so there may be less of a stigma associated, rather than just choosing a response that says “yes, I am prejudiced toward...” The first index item asks respondents to rate on a scale of 1 to 7 whether or not they think a certain group is committed to strong families, with 1 being a strong commitment and 7 being no strong commitment. The next item asks whether they think a certain group is hard working (1) or lazy (7). The final item asks whether they think a certain group is unintelligent (1) or intelligent (7). The question on intelligence is reverse coded (negative to positive) following the other items used in the scale.

The prejudice index is based on previous research indicating that Whites position their views of other groups in reference to how they view themselves (e.g., Blumer, 1958). Therefore, Dixon (2006) subtracted Whites’ placement of each minority group from the placement of their own group, then combined scores to create scales. Higher scores indicate the White respondent rated the other race more negatively than their own, indicating greater prejudice. A score of zero indicates that the White respondent rated the other race at the same level as his or her own, indicating no prejudice. Negative scores indicate that White respondents rated the other race more positively than their own, indicating they hold members of the other race or ethnic group in higher esteem than their own (see Figure 1).

*Figure 1*



**Independent Variables**

We also employ a series of variables assessing the racial/ethnic make-up of respondents’ local communities. Respondents were asked, “Just your best guess - what percentage of the people who live in your community is each group?” Since we examine anti-Black, anti-

Asian, and anti-Hispanic prejudice, we use variables that gauge minority presence within the respondent's community. Respondents reported a percentage between 0-100, and we employ composition variables corresponding to the respective dependent variable (e.g., percent Black composition is used with anti-Black prejudice, etc.). Based on prior research (e.g., Allport, 1954; Carter et al., 2005; Crowder, 2000; Emerson et al., 2001; Jackson, 2000; Krysan, 2000; Logan, 2002), we operationalize the characteristics of White households as independent variables. We first include region, which coded as a series of dummy variables for various sections of the United States - West, Midwest, Northeast, and finally the South, which is used as a reference group. This schema is based on definitions provided by the U.S. Census Bureau (see [http://www.census.gov/geo/www/us\\_regdiv.pdf](http://www.census.gov/geo/www/us_regdiv.pdf)).

Size of place is measured at the nominal level, and is dummy coded into categories for city, suburb, other city, and rural households, with suburb used as the reference group. Household type is measured at the ordinal level. We dummy coded variables for married with children households, not married with children households, and households without children, and use married with children households as the reference group. Accordingly, the reference group in each model consists of married Whites who live in Suburban households in the South with children. We employ family income and education measures to operationalize social class. Education is measured in years of education, and family income is measured at the ordinal level. Respondents were asked to group their total family income before taxes from the previous year. In the GSS, family income is grouped according to midpoints, making it an ordinal-level variable (see Ligon, 1988 for further discussion), but due to significant skewness and kurtosis, we logged the income variable to yield a more manageable distribution for analysis (see Tabachnick & Fidell, 2007). We also include control variables consistent with other studies of racial attitudes, including age (in years) and sex (e.g., Dixon, 2006; Krysan, 2000). Preliminary analysis revealed several missing cases for family income, and we replaced these cases with the sample mean income of \$38,331.93. Accordingly, we created a flag variable for the missing cases to use as a control in regression equations.

### *Sensitivity Analysis*

We analyze these data using cluster analysis, conducted in STATA, and linear regression, conducted in SPSS. Since households are nested within region, we also employ cluster analysis to detect differences in prejudice across region that might also explain differences across households. This is to ensure any significant differences at the household level do not actually reflect regional differences. This test detects bias in standard errors within the linear regression model, and allows the researcher to correct the standard errors if clustering does indeed exist (Long & Freese, 2003). The statistical models for the cluster analysis are as follows:

$$\begin{aligned} \text{Anti-Minority Prejudice}_j = & A + B_1\text{Northeast}_j + B_2\text{Midwest}_j + B_3\text{West}_j + \\ & B_4\text{Community Composition}_j + B_5\text{Household Not Married with Children}_j \\ & + B_6\text{Household No Children}_j + B_7\text{City}_j + B_8\text{Rural}_j + B_9\text{Other Urban}_j \\ & + B_{10}\text{Education}_j + B_{11}\text{Family Income}_j + B_{12}\text{Income Flag}_j + B_{13}\text{Age}_j + \\ & B_{14}\text{Female}_j + u_j \end{aligned}$$

$$\text{where } u_j = \sum_{j_{\text{cluster}}} e_i * x_i$$

### **Regression Analysis**

Cluster analyses did not suggest significant standard error biases, and we thus proceeded with our regression models. We conduct models independently for each outcome variable, with regression equations shown below (anti-minority prejudice is substituted for each separate dependent variable):

$$\begin{aligned} \text{Model 1: Anti-Minority Prejudice}_j = & A + B_1\text{Northeast}_j + B_2\text{Midwest}_j + \\ & B_3\text{West}_j + B_4\text{Community Composition}_j + B_5\text{Household Not} \\ & \text{Married with Children}_j + B_6\text{Household No Children}_j + B_7\text{City}_j + \\ & B_8\text{Rural}_j + B_9\text{Other Urban}_j + B_{10}\text{Education}_j + B_{11}\text{Family Income}_j \\ & + u_j \end{aligned}$$

$$\begin{aligned} \text{Model 2: Anti-Minority Prejudice}_j = & A + B_1\text{Northeast}_j + B_2\text{Midwest}_j + \\ & B_3\text{West}_j + B_4\text{Community Composition}_j + B_5\text{Household Not} \\ & \text{Married with Children}_j + B_6\text{Household No Children}_j + B_7\text{City}_j + \\ & B_8\text{Rural}_j + B_9\text{Other Urban}_j + B_{10}\text{Education}_j + B_{11}\text{Family Income}_j \\ & + B_{12}\text{Income Flag}_j + B_{13}\text{Age}_j + B_{14}\text{Female}_j + u_j \end{aligned}$$

$$\begin{aligned} \text{Model 3: Anti-Minority Prejudice}_j = & A + B_1\text{Northeast}_j + B_2\text{Midwest}_j \\ & + B_3\text{West}_j + B_4\text{Community Composition}_j + B_5\text{Community} \\ & \text{Composition*Northeast}_j + B_6\text{Community Composition*Midwest}_j \\ & + B_7\text{Community Composition*West}_j + B_8\text{Household Not} \\ & \text{Married with Children}_j + B_9\text{Household No Children}_j + B_{10}\text{City}_j + \\ & B_{11}\text{Rural}_j + B_{12}\text{Other Urban}_j + B_{13}\text{Education}_j + B_{14}\text{Family Income}_j \\ & + B_{15}\text{Income Flag}_j + B_{16}\text{Age}_j + B_{17}\text{Female}_j + u_j \end{aligned}$$

Model one tests all hypotheses by separately testing for the difference between means for anti-minority prejudice among the household characteristics of region, perception of community minority composition, household type, city size, and education. Again, we analyze each dependent variable independently of the others (anti-Black prejudice, anti-Hispanic prejudice, and anti-Asian prejudice) and community minority composition corresponds to

the prejudice being tested (e.g., perception of percent Blacks in the community with anti-Black prejudice). Model two examines control variables, and estimates the effect of anti-minority prejudice among the household characteristics of region, perception of community minority composition, household type, city size, and education while controlling for sex, age, and family income. This helps ascertain whether the effect of household characteristics and perception of community composition remain significant on anti-minority prejudice while simultaneously holding individual-level variables constant.

Finally, model three tests interaction effects. Preliminary analysis suggested a strong regional effect over the other independent variables, so we included regional interaction effects with the perception of community racial composition to look more closely at the relationship between the two variables tied to place in relation to contact theory. Model three estimates the impact of household characteristics and perception of community composition on anti-minority prejudice and introduces an interaction term to determine if the effect of perception of community minority composition on prejudice differs by region. This is important because the aspect of contact theory that this study explores is grounded in place, and the measure of location in this study is region. Contact theory posits that interaction with minorities decreases prejudice, and the region in which a White household is located may have an impact on the perception of community composition.

## **RESULTS**

Table 1 presents means and standard deviations for each variable in the analysis. Tables 2 through 4 present regression results and are discussed below. We discuss results from the third and completed model, unless otherwise noted.

*Table 1. Means and Standard Deviations of Prejudice Indices, Perception of Community Composition, and Household Characteristics (n = 798)*

	Non-Hispanic and Non-Asian White Respondents			
	Mean	Std. Dev.	Minimum	Maximum
Anti-Black Prejudice	2.233	3.449	-6	18
Anti-Hispanic Prejudice	0.940	3.162	-8	13
Anti-Asian Prejudice	-0.486	3.073	-10	16
<b>Region</b>				
South	0.310	0.463	0	1
Northeast	0.182	0.386	0	1
Midwest	0.267	0.443	0	1
West	0.242	0.428	0	1
<b>Community Composition</b>				
Estimated Percent Black	14.280	15.553	0	99
Estimated Percent Hispanic	13.850	16.791	0	97
Estimated Percent Asian	6.760	9.708	0	85
<b>Household Type</b>				
Married with Children	0.267	0.443	0	1
Not Married with Children	0.098	0.297	0	1
No Children	0.635	0.481	0	1
<b>City Size</b>				
City	0.173	0.378	0	1
Suburb	0.269	0.444		
Rural	0.112	0.315	0	1
Other Urban	0.446	0.497		
Family Income (Logged)	10.173	0.964	5.81	11.86
Education	13.750	2.646	3	20
Age	44.510	16.481	18	89
Female	0.524	0.500	0	1
Income Flag	0.073	0.259	0	1

### *Anti-Black Prejudice*

Regression results indicate that region, the product of community composition and region, education, age and sex are significant. While controlling for individual-level characteristics, anti-Black prejudice in the households located in the Midwest ( $B = -0.145$ ) is significantly lower when compared to anti-Black prejudice in households located in the South ( $p \leq .05$ ). Introducing the interaction terms gives a more detailed picture of the effect of region on anti-Black prejudice. The percent Black composition/Northeast interaction term is significant at the .01 level ( $B = 0.162$ ). The positive coefficient for the product term indicates that the difference in levels of prejudice between regions is greater when respondents report a higher perceived percentage of Blacks in their communities. This means that the effect of perceived percentage of Blacks living in the community area has a more pronounced effect on prejudice towards Blacks in the Northeast rather than the South. Thus, as respondents' perceptions of the percentage of Blacks living in their community increases, levels of anti-black prejudice decrease, but the effect is only significant for the Northeast region.

Results also indicated that as the level of education increases for the White respondent, anti-Black prejudice decreased by 0.184 ( $p \leq .001$ ), controlling for the other household factors, perception of Black community composition, and individual characteristics. In addition, the individual-level control variables were significant. Age had a positive relationship with anti-Black prejudice. As age increases, anti-Black prejudice increases ( $B = 0.226$ ,  $p \leq .001$ ). Females have lower levels of anti-Black prejudice than Males ( $B = -0.107$ ,  $p \leq .01$ ).

Model 1, without controlling for household factors and individual characteristics, had an  $R^2$  of 0.053, meaning that 5.3% of the variance in anti-Black prejudice is explained by the variance in the household variables. In further models that included control variables and interaction terms, the  $R^2$  increased to 11.1% and then to 12.2% (see Table 2).

Table 2. Standardized Coefficients from OLS Regression of Anti-Black Prejudice for White Respondents in White Households (n = 789)

	Model 1		Model 2		Model 3	
<b>Region</b>						
South	---		---		---	
Northeast	0.000		-0.013		-0.119	*
Midwest	-0.075		-0.078	*	-0.145	**
West	-0.066		-0.057		-0.077	
Community Composition, Percent Black	-0.010		0.043		-0.058	
<b>Interaction Terms</b>						
Percent Black * South	---		---		---	
Percent Black * Northeast	---		---		0.162	**
Percent Black * Midwest	---		---		0.086	
Percent Black * West	---		---		-0.009	
<b>Household Type</b>						
Married with Children	---		---		---	
Not Married with Children	-0.020		0.010		0.000	
No Children	0.024		-0.039		-0.042	
<b>City Size</b>						
Suburb	---		---		---	
City	-0.081	*	-0.053		-0.048	
Rural	-0.028		-0.018		-0.014	
Other Urban	-0.112	**	-0.082		-0.067	
Education	-0.191	***	-0.185	***	-0.184	***
Family Income (logged)	---		0.040		0.046	
Income Flag	---		0.038		0.042	
Age	---		0.224	***	0.226	***
Female	---		-0.112	**	-0.107	**
Constant	6.369	***	3.027		3.138	*
R <sup>2</sup>	0.053		0.111		0.122	

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p < .001$



### *Anti-Hispanic Prejudice*

The regression results in Table 3 indicate that region, education, and age are significant. While controlling for other individual-level factors, anti-Hispanic prejudice for White respondents in White households located in the Northeast ( $B = 0.085$ ) is significantly higher when compared to anti-Hispanic prejudice in the South ( $p \leq .05$ , Model 2). As for the West, there are significantly lower levels of anti-Hispanic prejudice for White respondents in White households than in the South even with the individual-level characteristics ( $p \leq .05$ ). Whites living in White households in the West are 0.100 lower on the anti-Hispanic prejudice scale, controlling for other factors.

Education was statistically significant, even with the control variables. For every year increase in education, anti-Hispanic prejudice decreased by 0.166 ( $p \leq .001$ ). Age, one of the individual-level control variables, was also highly significant. As age increases, anti-Hispanic prejudice increases ( $B = 0.228$ ,  $p \leq .001$ ). Model 3 did not produce significant interaction effects for anti-Hispanic prejudice. For Model 1, without controlling for household factors and individual characteristics, had an  $R^2$  of 0.070, meaning that 7.0% of the variance in anti-Hispanic prejudice is explained by the household variables. With the inclusion of control variables in Model 2, the  $R^2$  increased to 11.8% (see Table 3).

Table 3. Standardized Coefficients from OLS Regression of Anti-Hispanic Prejudice for White Respondents in White Households (n = 774)

	Model 1		Model 2		Model 3	
<b>Region</b>						
South	---		---		---	
Northeast	0.096 *		0.085 *		0.082	
Midwest	-0.040		-0.050		-0.058	
West	-0.087 *		-0.100 *		-0.040	
Community Composition, Percent Hispanic	-0.019		0.004		0.035	
<b>Interaction Terms</b>						
Percent Hispanic * South	---		---		---	
Percent Hispanic * Northeast	---		---		0.009	
Percent Hispanic * Midwest	---		---		0.023	
Percent Hispanic * West	---		---		-0.093	
<b>Household Type</b>						
Married with Children	---		---		---	
Not Married with Children	-0.017		-0.002		0.001	
No Children	0.041		-0.022		-0.025	
<b>City Size</b>						
Suburb	---		---		---	
City	-0.077		-0.055		-0.057	
Rural	0.008		-0.001		-0.001	
Other Urban	-0.100 *		-0.082		-0.076	
Education	-0.175 ***		-0.162 ***		-0.166 ***	
Family Income (logged)	---		0.004		0.006	
Income Flag	---		0.033		0.034	
Age	---		0.228 ***		0.230 ***	
Female	---		-0.029		-0.033	
Constant	4.173 ***		2.114		2.013	
R <sup>2</sup>	0.070		0.118		0.122	

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p < .001$

**Anti-Asian Prejudice**

The regression results in Table 4 indicate that region, size of place, education, and age are significant. While controlling for other individual-level factors, anti-Asian prejudice for White respondents in White households located in the West ( $B = -0.112$ ) is significantly lower when compared to anti-Asian prejudice in the South ( $p \leq .01$ ). In other words, for each White respondent located in a White household in the West as opposed to the South, anti-Asian prejudice decreased by 0.112, controlling for other factors. In addition, White respondents living in White households located in rural areas had significantly higher levels of anti-Asian prejudice compared to those located in suburban areas of the largest SMSAs, net of individual-level control variables ( $B = 0.099, p \leq .05$ ).

Education was also found to be significant. For every year increase in education, anti-Asian prejudice decreased by 0.195 ( $p \leq .001$ ). In addition, one of the individual level control variables was also significant. Age had a positive relationship with anti-Asian prejudice. As age increases, anti-Asian prejudice increases ( $B = 0.087, p \leq .05$ ).

Again, Model 3 did not produce significant interaction effects for anti-Asian prejudice. For Model 1, without controlling for household factors and individual characteristics, had an  $R^2$  of 0.095, meaning that 9.5% of the variance in anti-Asian prejudice is explained by the variance in the household variables. In the second model, which included control variables, the  $R^2$  increased to 10.4% (see Table 4).

**Table 4. Standardized Coefficients from OLS Regression of Anti-Asian Prejudice for White Households (n = 770)**

	Model 1		Model 2		Model 3	
<b>Region</b>						
South	---		---		---	
Northeast	0.071		0.067		0.088	
Midwest	-0.037		-0.044		-0.062	
West	-0.120	**	-0.126	**	-0.112	*
Community Composition, Percent Asian	-0.026		0.034		0.055	
<b>Interaction Terms</b>						
Percent Asian * South	---		---		---	
Percent Asian * Northeast	---		---		-0.044	
Percent Asian * Midwest	---		---		0.035	
Percent Asian * West	---		---		-0.031	
<b>Household Type</b>						
Married with Children	---		---		---	
Not Married with Children	0.025		0.020		0.023	
No Children	0.037		0.000		0.000	
<b>City Size</b>						
Suburb	---		---		---	
City	-0.037		-0.038		-0.040	
Rural	0.101		0.096	*	0.099	*
Other Urban	0.052	*	0.048		0.047	
Education	-0.214	***	-0.192	***	-0.195	***
Family Income (logged)	---		-0.054		-0.048	
Income Flag	---		0.029		0.028	
Age	---		0.087	*	0.091	*
Female	---		-0.031		-0.033	
Constant	2.647	***	3.598	**	3.407	*
R <sup>2</sup>	0.095		0.104		0.107	

\* $p \leq .05$ , \*\* $p \leq .01$ , \*\*\* $p < .001$

## DISCUSSION

Previous research has not directly examined the link between household characteristics, contact theory, and levels of anti-minority prejudice for Whites. We do know that residential segregation exists and that this could be a result of preference, institutional access, or perhaps prejudiced views toward minorities. Segregation allows Whites to isolate themselves from minority groups. Is this isolation associated with racial/ethnic prejudice? In addition, as minority populations continue to grow, it follows that it will become more difficult to limit contact. This study used data from the 2000 General Social Survey to ascertain any relationship between residential segregation as measured by certain household characteristics of whites, contact with minorities, and racial prejudice.

Based on the analysis, the hypothesis that anti-minority prejudice would be greater among households located in the South was supported, except in one scenario. There were significant mean differences, and the mean of anti-Black prejudice for White respondents in White households was lower in the Midwest when compared to the South. This follows previous research on residential segregation, which found that White flight occurs more predominately in the South (Crowder, 2000). In addition, the mean of anti-Hispanic and anti-Asian prejudice in White households was significantly lower in the West when compared to the South. This finding is also consistent with previous research that found higher racist attitudes among Southerners (Carter et al., 2005). For this study, it means that there is some relationship that exists between the regional distribution of White households and racial/ethnic prejudice.

There was a significant interaction effect with perception of Black community composition in the Northeast when compared to the South. An increase in perception of Black community composition for White respondents located in the Northeast was associated with a decrease in anti-Black prejudice, when compared to households located in the South. This indicates that contact with Blacks matters more in the prediction of lower prejudiced views among Whites in the Northeast than in the South. Allport (1954) specifies the aforementioned conditions that must exist for contact to truly reduce prejudice such as individuals of different race or ethnic groups having equal status or working together toward common goals. These conditions may be more prevalent in the North. Since White Flight occurs more predominately in the South (Crowder, 2000), it may be the case that Whites are more isolated in this compared to other U.S. region. An increase in perception of Black community composition may not make a significant enough impact in already isolated areas to affect prejudiced attitudes. Or, the conditions that must exist for contact to reduce prejudice may never occur because Whites may flee with an initial increase of Black residents.

The one case that did not follow the first hypothesis was for anti-Hispanic prejudice in White households in the Northeast, which was significantly higher compared to the South. This could be due to a number of factors. As Weaver (2007) points out, Hispanics tend to be grouped geographically by origin. In this particular relationship, Puerto Ricans are likely to live in the Northeast while Mexicans are likely to live in the South (Weaver,

2007:269). Another factor could be contact theory. While there was no significant interaction effect with perception of Hispanic community composition by region, and that variable represented contact, we cannot ignore the difference in Hispanic population by these two regions. From 2000 to 2006, the Hispanic population in the Northeast increased by 15.1%. In comparison, the Hispanic population in the South increased by 31.2% (U.S. Census Bureau, 2006). With such high Hispanic population growth in the South, it may be the case that more contact with this population has allowed prejudiced attitudes to decline.

The hypothesis that White households in the Suburbs would have higher levels of anti-minority prejudice was not supported. White respondents in White households in rural areas had significantly higher levels of anti-Asian prejudice than households in suburban areas. This could be a result of less contact with Asians in rural areas. Although this is an assumption, this finding does show that contact operates in a specific way.

Education levels had a significant effect on anti-minority prejudice. Across anti-Black, anti-Hispanic, and anti-Asian prejudice, an increase in years of education attained was associated with a highly significant decrease in prejudice. This follows previous research into racial prejudice (Logan, 2002), and is also a key component in the spatial assimilation model. Residential segregation should dissipate, this model claims, as levels of education increase across all races (Charles, 2003). This finding is a positive step towards reducing racial/ethnic prejudice. However, residential segregation still exists and minorities do not have the same access to resources as Whites. As for our contact hypothesis, there were no significant findings to suggest that higher levels of perception of minority community composition had an effect on racial/ethnic prejudice. This is aside from the interaction term previously discussed. However, as the other significant variables show, contact may have some indirect effects on the racial make-up of the region and city size that these households are located. Indeed, numerous studies have indeed shown the importance of contact (Pettigrew, 2008; Weaver, 2007).

## CONCLUSION

Despite the important findings of this research, more research into the causes and mechanisms of residential segregation is still needed. Region, education, and age had effects across all minority prejudice. As indicators of residential segregation, household type and suburban location were not significant predictors of racial/ethnic prejudice in the current study. However, we know that this is where White flight is continuing to occur. Research on residential segregation focuses on the city/suburb dichotomy, as Whites “flew” from cities into suburbs. More research should delve into the prejudiced views of rural residents, as they are also isolated. Further research must disentangle these factors, and incorporate questions on implementation of racially prejudiced policies as well as principle, or feelings of prejudice (Dixon, 2006). While implementation questions can establish a possible underlying prejudice against minority groups, this research can still be looked at as a step in exploring the relation of household characteristics and community perception to prejudiced attitudes of Whites. Furthermore, the contact variable used does not satisfy

all the requirements of the contact theory. Ideally the contact variables would represent Allport's conditions of contact that reduces prejudice (1954). In addition, to completely link racial prejudice to household characteristics and community perception, research would need to consider locational data of respondents. The racial make-up of the areas where respondents live would provide an alternative measure and more nuanced test of contact theory.

This study emphasizes the importance of region, education, and age on levels of racial/ethnic prejudice. Higher levels of education were associated with lower levels of prejudice, while increase in age was associated with higher levels of prejudice. This can be a tool to further reduce prejudice. Also, while many studies focus on the prejudiced and racist attitudes of the South, this research shows a more complicated picture. There were differences among households in the Midwest and the South on anti-Black prejudice, and among the West and the South on anti-Hispanic and anti-Asian prejudice. However, households in the Northeast had higher levels of anti-Hispanic prejudice than households in the South. This finding alone is important as research on the Hispanic population evolves as the population rapidly expands. Further research should look into Hispanic differences by origin, and if there are any trends of White prejudice toward different groups. With such high Hispanic population growth in the South, perhaps more contact with this population has allowed prejudiced attitudes to decline. This claim needs to be investigated further, but appears to be supported by this analysis.

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## **“And still she asked, where, in this system, was there room for a studio?”: Reading Gender and Lesbian Space in Vita Sackville-West’s *All Passion Spent***

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### **Abstract**

*In my essay “And still she asked, where, in this system, was there room for a studio?: Reading Gender and Lesbian Space in Vita Sackville-West’s All Passion Spent,” I investigate the construction of lesbian space in the context of both the historical reality of a patriarchal society, and, within it, a patriarchal literary tradition. I place this text in the context of recent theoretical work by Adrienne Rich, Terry Castle, Judith Butler, Sharon Marcus, and Luce Irigaray, among others. My argument, influenced by Adrienne Rich’s idea of the lesbian continuum, investigates the ways in which widowhood opens up a lesbian/woman-centered space for Lady Slane in Sackville-West’s novel. Lady Slane’s newfound independence creates a subject position that allows her to make a space for herself away from patriarchal control. I focus on female autonomy in All Passion Spent, in particular, the creation of a female identity and female space that develops within a feminist discourse. This novel challenges traditional representations of the lesbian; consequently, it has been praised for creating alternative lesbian images as well as criticized for producing stereotypes. I break new ground by positing that the novel is a lesbian one. Sackville-West’s novel might not be labeled as such by some because it does not appear to present a lesbian identity. However, within an inclusive lesbian theoretical perspective, the novel fits easily, if rather differently from other novels (such as Radclyffe Hall’s The Well of Loneliness (1928) and Virginia Woolf’s Orlando (1928), into the lesbian continuum.*

Vita Sackville-West's *All Passion Spent* (1931) portrays the life of an elderly widow who desires a space of her own. As Carol Ames writes in her essay "Nature and Aristocracy in V. Sackville-West," the novel "posits that it is never too late to free oneself by declaring oneself independent of society's pressures and expectations" (19). Indeed, Sackville-West's work depicts an aristocratic woman breaking away from traditional and social expectations after the death of the family patriarch. After the death of her husband, Lady Slane, the protagonist<sup>1</sup>, embarks on a new path in life, separate from her family. She realizes how much she has sacrificed for her marriage and her family; earlier in her life, she had wanted to be an artist, and now that she is in control of her own life (much to the dismay of her children), Lady Slane separates and isolates herself from the family that controlled her for so long. She recognizes that her marriage trapped her in the role of "the good wife" (Ames 19). Providing a retrospective analysis of her married life, Lady Slane recognizes that she ultimately played a passive role in her marriage; she lost herself and betrayed her own desires in a rushed marriage in order to adhere to tradition and respectability. Not until her husband's death does she begin to notice that a world of independence and freedom awaits her in a lesbian space<sup>2</sup> that we can now recognize as such.

In this essay, I draw upon Adrienne Rich's idea of the "lesbian continuum" to argue that Lady Slane and her maid, Genoux, create a lesbian space in Lady Slane's new home in Hampstead, a space that counters the heteronormative spaces she inhabited throughout her life. Focusing on the role of the narrator, I show that the novel ridicules Lord Slane, whose masculine gender position affords him control over Lady Slane. I provide an analytical perspective on Lady Slane's marriage to show that the novel views marriage as a hindrance to her development as a woman due to her family's expectations and assumptions. In addition, I argue that the protagonist creates a lesbian space void of male control after having gained a clear view of her married life and the institution of marriage.

I situate my argument theoretically with critics such as Adrienne Rich, Terry Castle, and Eve Kosofsky Sedgwick. These writers and critics/scholars have helped me to recognize the concepts of the "lesbian continuum," lesbian identity, and homosocial bonds, which provide an understanding of a lesbian space that emerges from Sackville-West's novel as the protagonist gains agency and begins to control her own life. The characters in the novel are historically situated in gender roles that provide clear definitions of what it is to be a man or woman. Lady Slane ultimately rebels against these established gender identities in order to carve out a space for herself. My argument concerning lesbian space in *All Passion Spent* is based on Adrienne Rich's idea of re-envisioning texts through what she calls the "lesbian continuum," a concept that emerged during second-wave feminism and focuses on a vast range of woman-identified experiences, both sexual and non-sexual, in order to broaden our sense of the full range of women's experiences. Woman-identified experiences

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1 Before the protagonist's marriage to Lord Slane, the narrator sometimes refers to Lady Slane by her first name, Deborah.

2 I define lesbian space as a space void of male presence and male control. Lesbian space can be the location of exclusive female friendship or female sexual relationships that males do not inhabit.

are women-centered experiences articulated from the perspectives of women rather than men. Indeed, Rich's concept brings to the foreground hitherto largely neglected experiences and removes them from the normative heterosexual context, which normally evaluates and ranks experiences. This continuum goes beyond the narrow heterosexual construct of the clinical definition of lesbianism, as essentially sex between women. Rather, Rich wants the term "lesbian continuum" "to include a range—through each woman's life and throughout history—of woman-identified experiences, not simply the fact a woman has had or consciously desired genital sexual experience with another woman" (349). Women's recognition of shared experiences, such as male oppression, resisting marriage, etc., draws attention to other woman-identified experiences throughout history as being lesbian regardless of whether or not a sexual component exists within the relationship.

Eve Kosofsky Sedgwick's *Between Men: English Literature and Male Homosocial Desire* (1985) helps explain the marginalization of lesbian novels and reinforces the conceptual usefulness of the "lesbian continuum" even though she does not use the term. Sedgwick writes, "It is crucial to every aspect of social structure within the exchange-of-women framework that heavily freighted bonds between men exist as the backbone of social form or forms" (86). But this raises an interesting point about the limits of male bonds, as Castle points out, "How then to separate 'functional' male bonds—those that bolster the structure of male domination—from those that weaken it?" (69) Sedgwick's argument illustrates that functional male bonds are those that reinforce patriarchy through the "male-female-male 'erotic paradigm'" such as Charles Dickens' novel *Our Mutual Friend*. The male-female-male triangle is a "sign...of normative (namely, heterosexual) male bonding and of a remobilization of patriarchal control" (69). Thus, homosocial bonds are a slippery slope that requires erotic feelings between men to be absent because male homosexuality undermines the patriarchal super-structure. Traditionally, only those works of literature that undergird homosocial bonds and patriarchy are deemed worthy of the literary canon. Thus, the lesbian novel is marginalized.

Sedgwick's argument appears to reinforce the distinction (although sometimes blurred) between homosocial and homosexual bonds:

At this particular historical moment, an intelligible continuum of aims, emotions, and valuations links lesbianism with the other forms of women's attention to women: the bond of mother and daughter, for instance, the bond of sister and sister, women's friendship, "networking," and the active struggles of feminism. The continuum is crisscrossed with deep discontinuities—with much homophobia, with conflicts of race and class—but its intelligibility seems now a matter of simple common sense. However agonistic the politics, however conflicted the feelings, it seems at this moment to make an obvious kind of sense to say that women in our society who love women, women who teach, nurture, suckle, write about, march for, vote for, give jobs to, or otherwise promote the interest

of other women, are pursuing congruent and closely related activities. Thus the adjective “homosocial” as applied to women’s bonds...need not be pointedly dichotomized as against “homosexual”; it can intelligibly denominate the entire continuum. (2)

Indeed, the “lesbian continuum” captures the full range of differences in female bonding that the term homosocial does not. Sedgwick advances her argument concerning female and male homosocial experiences with a discussion on the establishment of patriarchal societies and the transfer of power to and from men via their homosocial bonds. The male homosocial relationship is “founded on an inherent and potentially active structural congruence” (Sedgwick 25). This relationship has historical purposes rooted in institutionalized prejudices. For example, the male homosocial bond “may take the form of ideological homophobia, ideological homosexuality, or some highly conflicted but intensively structured combination of the two.” Although lesbian relationships “must always be in a special relation to patriarchy,” these relationships are wholly different from male homosocial bonds because lesbian relationships are “on different [sometimes opposite] grounds and working through different mechanisms” (Sedgwick 25).<sup>1</sup> For example, men’s professional sports have been highly criticized for maintaining a high level of homophobia since the dominant image of masculinity perpetuated through competition is coded heterosexual. Female professional sports, however, have not been subject to the same scrutiny as male professional sports because female professional sports are not as privileged in society. The privileging of male professional sports, therefore, lends a hand to institutionalizing the homophobia that in effect maintains a certain level of power. This is key in differentiating male homosocial relationships and female homosocial relationships. Therefore, the term female homosocial relationship does not even begin to scratch the surface for conceptualizing lesbian relationships.

Terry Castle’s groundbreaking work *The Apparitional Lesbian: Female Homosexuality and Modern Culture* (1993) is crucial to linking the theoretical and historical approaches on which I draw. Castle’s research is rooted in both critical theory and history in order to uncover lesbian identities. Castle comments,

Why is it so difficult to see the lesbian—even when she is there, quite plainly, in front of us? In part because she has been “ghosted”—or made it seem invisible—by culture itself. It would be putting it mildly to say that the lesbian represents a threat to patriarchal protocol: Western civilization has for centuries been haunted by a fear of “women without men”—of women indifferent or resistant to male desire. (5)

Indeed, the lesbian has been subject to being hidden away. She is seen as a threat to the patriarchal order because men in power cannot see women as being independent from male control. Castle makes explicit that she is arguing against preconceived notions of lesbian identity: “What the advocates of the ‘no lesbians before 1900’ theory forget is that there

<sup>1</sup> The point here is to present another argument for the preference of “lesbian continuum” over “homosocial.”

are myriad ways of discovering one's desire" (9). Historically speaking, the lesbian is not a twentieth-century invention. For example, nineteenth-century writer Anne Lister serves as a representation of a sexual lesbian. Castle points out that "sex between women was technically possible" (11). Although she focuses on sexual relationships between women, her argument concerning the covering up of lesbian identities or, more broadly, woman-centered ones, is valuable for my purpose.

The historical grounding of my essay begins with Lillian Faderman's *Surpassing the Love of Men: Romantic Friendship and Love between Women from the Renaissance to the Present* (1981). Faderman includes an historical outline of women's lives in Victorian England. Concerning women's roles, she comments,

Throughout much of the nineteenth century, women moved still farther from men as both continued to develop their own even more distinct sets of values. Men tried to claim exclusively for themselves the capacity of action and thought, and relegated women to the realm of sensibility alone. Women made the best of it: They internalized the only values they were permitted to have, and they developed what has been called the Cult of True Womanhood. The spiritual life, moral purity, sentiment, grew in importance. (157)

Faderman demonstrates how women have been subject to regulation, particularly in the Victorian era. Women were essentially seen as the weaker sex. This is well illustrated in works such as "Locksley Hall" (1842) by Alfred, Lord Tennyson (Faderman 158). In order to keep women under male control, female friendship was encouraged and seen as a "means of keeping women in their place by encouraging their self-image as primarily sentimental beings, too pure for the material world" (Faderman 162). Thus, female friendship was deemed acceptable because it was not viewed as a threat to the established patriarchy.<sup>1</sup>

Sharon Marcus's work *Between Women: Friendship, Desire, and Marriage in Victorian England* (2007) explores the varied lives of Victorian women in England between 1830-1880. Her analysis of marriage and female friendship and desire draws upon the works of Carroll Smith-Rosenberg, Adrienne Rich, and as the title implies Sedgwick's *Between Men: English Literature and Male Homosocial Desire*. Marcus's research on female friendship draws upon a prominent conduct book published by Sarah Stickney Ellis in 1839. Ellis "identified *The Women of England* (1839) as daughters, wives, and mothers ensconced in a familial, domestic sphere" (Marcus 25). One of the prescriptions made by the writer in order to instill correct feminine behavior in girls was through a friend. Marcus points out that "contemporary scholars who cite [Ellis] as representative of Victorian gender ideology consistently overlook her articulation of female friendship as a basic element of a middle class organized around marriage, family, and Christian belief" (Marcus 25). Indeed, female

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<sup>1</sup> Radclyffe Hall's *The Well of Loneliness* can be seen in this context—when female 'friendships' go beyond 'acceptable' bonds.



friendship, which Rich sees as part of the lesbian continuum, would become one of the most fundamental bonds between women in the Victorian period.

As demonstrated by Adrienne Rich's lesbian continuum, bonds between women can be understood in two ways, either sexual or non-sexual. Marcus cites Carroll Smith-Rosenberg's "The Female World of Love and Ritual" (1975) as a starting point for identifying female friendships and credits this profound essay as shaping lesbian studies. But Marcus points out that although many critics cite Smith-Rosenberg's essay, many scholars of the Victorian family "have not heeded its call to incorporate the study of friendship into the history of family marriage" (Marcus 30). Many critics view female friendship as being an essential component of the Victorian family. Thus, an understanding of how female friendship functioned in Victorian England is necessary in conceptualizing its importance. For example, evangelical Christianity viewed female friendship as a way to "cultivate" key tenets of their religious doctrine (Marcus 65).<sup>1</sup>

For many followers of the Christian tradition, in particular Evangelical Victorians, female friendship held close ties to key principles of Christianity. For example, "Friendship became itself a form of religious training by helping women cultivate self-examination and worldly detachment. The philosophical discourse of male friendship had always emphasized the friend as a truth-telling critic; women similarly saw friends as agents of spiritual growth" (Marcus 65). In addition, "indifference to material gain, acceptance of death, and belief in an afterlife," were all major pillars of the Christian key in Victorian England that depended upon female friendship as a way in which women could "cultivate" these tenets (Marcus 65). Although Evangelical Christianity contained fundamentalist dogma, these Victorians "paved the way for understanding friendship as analogous to the most fundamental forms of kinship regulated by religious and civil law," but was "less physically intimate, more prone to be idealized as perfect than idolized despite their imperfections" (Marcus 66).

As the above discussion of my theoretical and historical contexts indicates, the feminist movement would enable critics to understand and discover neglected texts that scrutinize the institution of marriage from a woman's perspective. Faderman comments,

Society saw heterosexual unions in measuring stick terms: In a suitable marriage the male was more of everything—he was older, taller, stronger, richer, smarter. It was inculcated in a girl that she must be less of everything than the man with whom she would spend most of her earthly existence. Her daily life was to be a constant reminder of her junior status. A nineteenth-century woman with an ego strong enough to envision being an earthly success would have difficulty accepting an unexamined, a priori definition of herself as inferior to her lifemate. (205)

Faderman illustrates the heterosexual marriage paradigm well by portraying how women were submissive subjects. The "daily life" included the roles of both wife and mother, which

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<sup>1</sup> Although *All Passion Spent* does not explicitly mention religion, one could perhaps argue that religion could have been an important part of the patriarchal Slane household.



bound women to the home. The feminist movement gave women a sense of independence and freedom that a female network of support created. Heterosexual marriage was no longer the only option for women, and many chose to denounce the institution in favor of a career or education. But it is perhaps financial independence that paved the way for women to create varied lives without the presence of a man (Faderman 178).

In *All Passion Spent*, the third-person omniscient narrator serves as the moral center of the novel. Although Wayne C. Booth claims in *The Rhetoric of Fiction* (1983) that a narrator is unreliable “when he [or she] does not” act in accordance with social norms (159), the narrator’s rejection of these norms in *All Passion Spent* paradoxically constitutes the narrator’s reliability. In her introduction to Sackville-West’s novel, Victoria Glendinning summarizes the narrator’s thoughts about Lady Slane as a wife and mother: “[s]he recalls her role as loving ‘appendage’; she has been ‘a lonely woman, at variance with the creeds to which she apparently conformed’” (*APS*, x). Lady Slane’s position as an “appendage” illustrates the role she fulfilled in her marriage. Indeed, the idea of separate spheres clearly relegates woman to the home as both wife and mother. Lady Slane does not even have a self or any kind of separate identity, let alone a space of her own, simply because she is Lord Slane’s wife. The novel’s narrator is crucial to an understanding of the presence of irony. The third-person narrator’s sustained ironic undermining of Lord Slane’s character, activities, and position in society establishes an alternative basis for normative reliability. Crucially, the narrator tends to approve of Lady Slane’s views, which marks Lady Slane’s position a moral one. The ironic distancing from Lord Slane and his patriarchal position indicates a reevaluation of established patriarchal norms.<sup>1</sup> The narrator’s descriptions and comments about Lord Slane are ironic in the sense that the text appears on the surface to suggest he is a genuinely nice man and accomplished. However, the reader soon realizes that the positive comments about Lord Slane’s reputation as a politician are articulated from the perspective of those characters who share his values, not the narrator’s perspective. Indeed, the point is that the narrator does not share society’s gendered value system in which men are in control and women are not. The “public” and “colleagues” (read, men) heap praise on his life and his career accomplishments. Lord Slane’s professionalism and poise become part of a system of measure to indicate one’s greatness and success. The narrator eschews female commentary altogether in describing Lord Slane’s public position, thereby illuminating the silencing from patriarchal control of female voices who speak out on patriarchal figures. This becomes part of the larger issue throughout the text that gives the reader a sense of Lady Slane’s subjugation.

1 Similarly, Marilyn R. Farwell’s essay “Heterosexual Plots and Lesbian Subtexts: Toward a Theory of Lesbian Narrative Space” develops an argument aimed at foregrounding the lesbian aspects of the novel. I employ Farwell’s approach for breaking down narrative codes in order to find lesbian subtexts in heterosexual plots. She points out that creating a separate space for lesbian identities is crucial in uncovering a history of lesbianism. Frequently, heterosexual plots occlude, or marginalize, lesbian desire; thus, lesbian desire never surfaces due to the implications that would arise if a female character were to identify as a lesbian. I posit that mainstream critics of the canon of English literature frequently neglect Vita Sackville-West’s affair with Virginia Woolf. Both women were married; thus, lesbian sexuality is rarely mentioned in the context of their lives, excepting a few biographies (most notably, Suzanne Raitt’s *Vita and Virginia*).

Once the narrator is seen as painting Lord Slane as a misogynist, casting him in a light wholly different from that of the initial descriptions by other characters, many readers will recognize him as being a hindrance to Lady Slane's independent development. Lord Slane may have been a force in the political arena and well-respected by other men; yet he is also sexist, particularly concerning the position of women in society. The narrator states, Henry was a "very masculine man; masculinity, in spite of his charm and his culture, was the keynote of his character" (*APS*, 219). Concerning women, he "had definite, masculine ideas" about their status in society, in particular their position in the home and motherhood: "[a]lthough secretly proud of his rising little sons, he pretended even to himself that they were...entirely their mother's concern." In an ironic tone, the narrator claims, "[s]o, *naturally*, [Lady Slane] had endeavoured to adopt those views" (*APS*, 182, emphasis added).<sup>1</sup> Henry also believes "[f]ew women...could be quiet without being dull, and fewer women could talk without being a bore" (*APS*, 207). He was only "satisfied" by Lady Slane; regarding other women, Henry holds a "low opinion of them" (*APS*, 207). He thinks of Lady Slane as a "simpleton" (*APS*, 22), mostly because she was a woman. Lord Slane's attitude exemplifies the typical patriarchal head of the family, which proves to be pervasive in influencing his children to adopt the same beliefs about their mother.

The narrator illustrates the patriarchal "dignity" Lord Slane has in the public sphere--so much so that the public regards Lord Slane as "another old landmark gone, another reminder of insecurity. The public, as a whole, finds reassurance in longevity, and, after the necessary interlude of reaction, is disposed to recognize extreme old age as a sign of excellence" (*APS*, 13). The public's perception of Lord Slane consisted of positive reflections: "Nobody had ever seriously attacked Lord Slane. Nobody had ever accused Lord Slane of being a back-number. His humour, his charm, his languor, and his good sense, had rendered him sacrosanct to all generations and to all parties; of him alone among statesmen and politicians could that be said" (*APS*, 15). Most importantly, his colleagues held him in high esteem. Lord Slane was agreeable with most everyone, which is why he was "destroyed as a statesman," but "when finally pushed into a corner, he would be more incisive, more deadly, than any man seated four-square and full of importance at a governmental desk" (*APS*, 16). Lord Slane relished the competition of being a politician, which seemed to be the ultimate expression of masculinity.

Mr. Bucktrout and Mr. Gosheron offer examples of masculinity that upset the patriarchal hegemonic order established by Lord Slane and his son, Herbert. Mr. Bucktrout and Mr. Gosheron do not display typical masculine characteristics, and it is important to note that Lady Slane does not interact with these types of men until after Lord Slane's

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<sup>1</sup> The narrator's ironic stance is particularly felt in Lady Slane's "natural" ability to "adopt [Lord Slane's] views" (*APS*, 182). A biological deterministic sentiment is expressed by the patriarchal culture that because Lady Slane is biologically a female, her "natural" position in life (that is, given by nature) is to care for her children and her husband, and that "naturally" she, too, should accept the patriarchal value system concerning woman's domesticity.

death.<sup>1</sup> Mr. Bucktrout exemplifies Genoux's (Lady Slane's maid) idea of "un vrai monsieur" (a true gentleman) because he "had strange and beautiful ideas; he was never in a hurry; he would break off in the middle of business to talk about Descartes or the satisfying quality of pattern. And when he said pattern, he did not mean the pattern on a wall-paper; he meant the pattern of life" (*APS*, 115). Mr. Bucktrout does not express the misogynistic qualities that Herbert and Lord Slane articulate. Instead, he literally bucks tradition in order to make way for new varieties of masculinity in the text.

Mr. Bucktrout issues important statements on the patriarchal social order of their culture:

The world, Lady Slane, is pitifully horrible. It is horrible because it is based upon competitive struggle—and really one does not know whether to call the basis of that struggle a convention or a necessity. Is it some extraordinary delusion, or is it a law of life? Is it perhaps an animal law from which civilization may eventually free us? At present it seems to me, Lady Slane, that man has founded all his calculations upon a mathematical system fundamentally false. His sums work out right for his own purposes, because he has crammed and constrained his planet into accepting his premises. Judged by other laws, though the answers would remain correct, the premises would appear merely crazy; ingenious enough, but crazy. (*APS*, 121-2)

Lady Slane questions Mr. Bucktrout's claim by asking whether he believed that "anyone who goes against this extraordinary delusion is helping civilization on." His response, "I do, Lady Slane; most certainly I do" (*APS*, 122). Mr. Bucktrout continues his evaluation of civilization: "Other methods may earn you respect in the long run, but for a short-cut there is nothing like setting a high valuation on yourself and forcing others to accept it. Modesty, moderation, consideration, nicety—no good; *they don't pay*" (*APS*, 122-3, emphasis added). Indeed, it is the concern for profit in a capitalistic society that matters most. He relates to Lady Slane how he used to handle his business decisions: "[f]or my practice had always been a discipline rather than an inclination" (*APS*, 123). Indeed, Mr. Bucktrout's career required a discipline rather than instinct. He narrates how he "woke a free man" on his sixty-sixth birthday and realized what was truly important in his life (*APS*, 123). Mr. Bucktrout's analysis of patriarchal institutions, such as the business sector, is significant because he is no longer a part of the hegemonic masculinity that controls culture. Unlike the other masculine figures in the novel, Mr. Bucktrout realizes how power is structured and distributed amongst those who adhere to ideology and tradition. He is

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1 Sedgwick's work on homosocial bonding could also be interpreted here to perhaps indicate that Lady Slane was only acquainted with men who conformed to the dominant notion of masculinity during her marriage. Considering her husband was an influential politician, she most likely only interacted with other men (not family members) in his presence. Lord Slane established friendships ("bonds") with men who shared his value system concerning woman's role in society.

outside of the established power; therefore, he is given a voice in the text that allows him to critique patriarchal power.

Mr. Bucktrout's leaves the world of competition behind; his choice parallels Lady Slane's choice to remain alone in her old age. In addition, Mr. Bucktrout's earlier characteristics resemble Lord Slane's demeanor in his marriage. Not until he "woke a free man" (*APS*, 123) did he shun capitalistic competition. Lady Slane and Mr. Bucktrout share similar experiences of adhering to socially constructed gender roles for women and men. Both experience an epiphany that a better life might exist beyond the ones they were currently living. Not until later in life are they afforded the insight brought through experience to make sound judgments that benefit their well-being.

A crucial aspect of the novel regarding the institution of marriage is Lady Slane's recollection of her husband's marriage proposal. Lady Slane's reflections portray a woman who was essentially lost in a robotic process. Before Henry proposes, Deborah reflects how Henry looked on that particular day and how she did not even want to touch him. Her thoughts reveal the separate realities each were in: "[h]e had gone. He had left her. Even while she conscientiously gazed at him and listened, she knew that he was already miles and miles away. He had passed into the sphere" of marriage, and he wanted Lady Slane to join him in that sphere. She remembers thinking that she should not accept his marriage proposal because it was not something she wanted to do, but rather something that was expected of her: "[s]he had heard her father say that young Holland would be Viceroy of India before they had heard the last of him. That would mean that she must be Vicereine, and at the thought she had turned upon him the glance of a startled fawn" (*APS*, 144). The protagonist realizes that she is about to become a minor character in someone else's plot. She is propelled by the requirement of the romance genre. Before Deborah was able to process being proposed to and her accepting the proposal, "there was her mother smiling through tears, her father putting his hand on Mr. Holland's shoulder, her sisters asking if they might all be bridesmaids, and Mr. Holland himself standing very upright, very proud, very silent, smiling a little, bowing, and looking at her with an expression that even her inexperience could define only as propriety" (*APS*, 144).

In addition to adhering to the convention, Deborah was faced with expectations. The narrator states:

She found herself suddenly surrounded by a host of assumptions. It was assumed that she trembled for joy in his presence, languished in his absence, existed solely (but humbly) for the furtherance of his ambitions, and thought him the most remarkable man alive, as she herself was the most favoured of women, a belief in which everybody was fondly prepared to indulge her. Such was the unanimity of these assumptions that she was almost persuaded into believing them true. (*APS*, 155)

This passage exemplifies how Lady Slane was expected to behave in a particular manner upon being engaged. The passage also illustrates how the discourse surrounding marriage

engagement should affect women. This is presented to us through the ironic tone of the narrator. Once again, the text reiterates the word “assumptions”; many in Lady Slane’s immediate community expect her to be lonely for Henry and missing him. This is echoed earlier in the novel when her children attempt to make living decisions for her in old age. They, too, assume what is best for Lady Slane rather than asking what she would like to do. Here Deborah is “surrounded by a host of assumptions” (*APS*, 155) that were not in the least applicable to her true feelings and no one asked how she felt, but rather expected her to feel a particular way about the upcoming marriage ceremony.

Lady Slane’s children attempt to control their mother through their discussion of her living arrangements, her possessions, and income. They discuss what they are going to do with her jewels, in particular, whether or not she should keep them. The children act in such a manner that one would think their mother had already passed away. They make assumptions about Lady Slane’s life. For example, they begin by discussing her living arrangements for her, even perhaps selling her home and making “her home among us” (*APS*, 31). Edith, the unmarried daughter, volunteers to live with her mother and take care of her: “. . .surely I ought to bear the brunt” (*APS*, 31). Carrie rebuts Edith’s remarks by saying it would be a “privilege” to watch (or rather, supervise), their “Mother in these last sad years of her life—for sad they must be, deprived of the one thing she lived for” (*APS*, 31). The children do not know that their mother is not sad at all or “deprived.” Rather, she was most alone and unhappy in her marriage. They also assume Lady Slane’s life is “shattered” because “she lived only for Father”; therefore, they expect her life must be one of “loneliness” (*APS*, 35). The new patriarch, Herbert, states, “We know how devoted you were to Father, and we realize the blank that his loss must leave in your life” (*APS*, 59). He and his siblings do not even consider the possibility that their mother is relieved that their father is dead and that she would now live for them. Indeed, the center of her life during her marriage was outside herself, but nevertheless his death leaves a “blank” in her life that will be filled with Lady Slane founding a new life.

Almost all of her children think of Lady Slane as submissive and frail, in particular, the patriarch in waiting, Herbert, who is the “true son of his father” (55). Lady Slane’s children frequently assume that she is not coherent and cannot be trusted to make sound choices regarding her well-being after the passing of her husband. This is ironic considering that her children are most out of touch with reality. Herbert exerts his masculinity by claiming the position of “head of the family” with his eldest sister, Carrie, as “his support” (*APS*, 58). A need to maintain power over his mother exemplifies his character. Herbert’s power stems from his wealth and his expression of masculinity. Herbert and Carrie essentially wish to become pseudo-parents in determining what is acceptable for their mother in terms of her living conditions, possessions, and income. They want to force their mother into their narrative. Yet, Lady Slane wishes to write her own plot, traditionally a male prerogative. Herbert and Carrie believe Lady Slane “had no will of her own; all her life long, gracious and gentle, she had been wholly submissive—an appendage.” Because she was simply an “appendage,” “[i]t was assumed that she had not enough brain to be self-assertive. ‘Thank

goodness,' Herbert sometimes remarked, 'Mother is not one of those clever women'" (*APS*, 24). He thinks of his mother as not possessing the capability of being assertive; therefore, he plans to do as he wishes for his own sake, regardless of his mother's own desires, which he believes she should not/does not have any. Her submissiveness would also reinforce his position and status. Instead, Herbert thinks of his own interests, but he never admits that. Much like his father, Herbert was "flattered by womanly dependence. Only for these three or four days...did he demand of his mother that she should hold opinions of her own. Yet at the same time, such was his masculine contrariness, he would have resented any decision running counter to his own ideas" (*APS*, 55).<sup>1</sup> Consequently, the "womanly dependence" reflects Herbert's power. Indeed, his sense of self develops not only from a privileged life but a masculinity that conforms to culturally constructed gender roles. Therefore, he has been inculcated with expectations to obtain and exercise power simply because he is wealthy and a masculine male.<sup>2</sup>

Herbert's remarks exemplify both an ageist and sexist rhetoric. As Luce Irigaray theorizes in her work *This Sex Which is Not One*,

The rejection, the exclusion of a female imaginary certainly puts woman in the position of experiencing herself only fragmentarily, in the little-structured margins of a dominant ideology, as waste, as excess, what is left of a mirror invested by the (masculine) 'subject' to reflect himself, to copy himself. Moreover, the role of 'femininity' is prescribed by this masculine specula(riza)tion and corresponds scarcely at all to woman's desire. (30, emphases added)

Indeed, the many assumptions Herbert makes about his mother emerge from a masculine discourse in conceptualizing female desire, not in the sense of sexuality, but rather in her personal desires concerning her well-being. His ideas about how to care for/control his mother are all merely "masculine specula(riza)tion." Herbert portrays a male who benefits from a socially sanctioned role. Although feminists might believe Lady Slane's son to be out of touch with reality, he is, in fact, most in touch with reality because he represents social convention. Heir to the family fortune, the new patriarch is most afraid of his mother posing a challenge: "That she might have ideas which she kept to herself never entered into [her children's] estimate. They anticipated no trouble with their mother...She was not a clever women. She would be grateful to them for arranging her few remaining years" (*APS*, 24-5). She has played her role in life and now she can die. Herbert's attitude toward his

<sup>1</sup> "Only for these three or four days" (*APS*, 55) refers to the days after Lord Slane's death.

<sup>2</sup> In *A Room of One's Own* (1929), Virginia Woolf eloquently points out the privileges that masculinity brings men, as she hypothesizes that if Mrs. Seton "had gone into business; had become a manufacturer of artificial silk or a magnate on the Stock exchange; if she had left two or three hundred thousand pounds to Fernham, we could have been sitting at our ease tonight and the subject of our talk might have been archeology, botany, anthropology, physics, the nature of the atom, mathematics, astronomy, relativity, geography" (35). Indeed, if Mrs. Seton were a man participating in masculine activities such as investing and studying hard masculine sciences, "We might have looked forward without undue confidence to a pleasant and honourable lifetime spent in the shelter of one of the liberally endowed professions" (Woolf 36).



mother is not one of concern for her well-being, but rather one of indifference. His feelings echo the sentiments that his father expressed toward Lady Slane.

The way in which Herbert and the other children feel that Lady Slane is lonely illustrates an interesting assumption that women must be in a heterosexual relationship in order to be happy or satisfied with life. Lady Slane derives her happiness from his happiness; hers is a secondary emotion that is dependent on his. The social construction of what constitutes happiness and fulfillment in life is implied in marriage as an institution. The children believe Lady Slane needs to be taken care of by a male. They do not even hypothesize independence for women, but rather, assume independence is only for the male sex. Consequently, they neglect to imagine Lady Slane's ability to carve out a space for herself.<sup>1</sup> Lady Slane is alone, but she is not *lonely*.

The narrator articulates how social acceptance and validation is brought to an individual through heterosexual marriage: "So now with Deborah and her parents, not to mention the rest of her world, she was made to feel that in becoming engaged to Mr. Holland she had performed an act of exceeding though joyful virtue, had in fact done that which had always been expected of her" (APS, 155). Indeed, the previous passage expresses how Lady Slane felt when Henry proposed marriage to her: like a "startled fawn" (APS, 144). Although she was obviously frightened of the idea of being engaged, Deborah did not diverge from what was expected of her because she could not imagine a different plot line.

Sackville-West's novel makes profound, radical statements on the institution of heterosexual marriage. In her article "Every Woman is an Island: Vita Sackville-West, the Image of the City, and the Pastoral Idyll," Louise A. DeSalvo argues that the novel "eloquently demonstrates...the life of a woman without a room of her own, without a work of her own, is the life of a somnambulist—is, in fact, no life at all" (97, emphasis added). Indeed, Deborah does not have a life to call her own, let alone a "room" (DeSalvo 97). The narrator articulates keen insight on the social reproduction of patriarchal marriage. For example, the narrator comments on how Henry would react if Deborah were a real artist:

"It would not do if Henry were to return one evening and be met by a locked door. It would not do if Henry...were to emerge irritably only to be told Mrs. Holland was engaged with a model...It would not do, in such a world of assumptions, to assume that she had equal rights with Henry. For such privileges marriages were not ordained" (APS, 162).

Indeed, she relinquishes her desire to become an artist in order to adhere to her roles in her marriage and society. Indeed, Deborah having her own occupation would not be acceptable.

Then, the narrator outlines what women can do in marriage:

But for certain privileges marriage had been ordained, and going to her bedroom Deborah took out her prayer-book and turned up the Marriage

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<sup>1</sup> This sentiment is also expressed in Ames' essay, in which she states that Lady Slane "cannot resist the assumptions of husband, children, grandchildren, and society that she exists to satisfy their needs" (20).

Service. It was ordained for the procreating of children...It was ordained so that women might be loving and amiable, faithful and obedient to their husbands, holy and godly matrons in all quietness, sobriety, and peace. All this no doubt was, to a certain extent, parliamentary language. But still it bore a certain relation to fact. And still she asked, where, in this system, was there room for a studio? (APS, 162)

This is one of the few passages in the novel where religious dogma manifests itself. Louis Althusser's "Ideology and Ideological State Apparatuses (Notes towards an Investigation)" demonstrates how ideology operates within a society. For example, Althusser's concept of interpellation is useful for my purposes to foreground Lord Slane's position as a time-specific ideological one. Moreover, the numerous references to a woman's "natural" state in marriage is linked to a scientific argument describing the female sex as being passive creatures.<sup>1</sup> With regard to Sackville-West's novel, Deborah's position in her marriage is inculcated through the Church and the family. The Church-Family model operates not only within the religious arena, but also within the educational arena, "and a large proportion of the functions of communications and 'culture'" (Althusser 151). Established patriarchal religion constructs a masculine discourse to which society is expected to adhere. Therefore, religious norms bestow power to the male, while trapping the female in a role: "loving and amiable, faithful and obedient to their husbands, holy and godly matrons in all quietness, sobriety, and peace" (APS, 162). Deborah's early desire to become an artist did not have a place in her marriage, which the narrator questions, "where, in this system, was there room for a studio?" (APS, 162) The simple answer is nowhere.

Her actions exemplify the pressure from an ideology that controls the individual and confines an individual's will to move away from established cultural expectations. Lady Slane understands how marriage subjugates women into bearing children to carry the name of the father and for women to be submissive; what is difficult to understand is perhaps why she would follow through with an institution she might oppose. The legitimacy of marriage affords women the opportunity to be a part of society and a larger social ordering. Therefore, the only fully respected position is marrying and producing offspring, thus allowing an individual to gain some type of perceived power. The protagonist's actions illuminate the pervasiveness of ideology. Regardless of whether or not one accepts the paradigm, Lady Slane was not able to thwart tradition.

The discussion on appearance in *All Passion Spent* is a metaphor for the larger context in which the novel is presented. It is not only about maintaining a certain image for the public, but also physical appearance. The narrator states, "What a queer thing appearance was, and how unfair. It dictated the terms of people's estimate throughout one's whole life. If one looked significant, one was set down as insignificant; yet, one probably didn't look insignificant unless one deserved it" (APS, 26). Earlier in this essay, Lord Slane and Herbert's expression of their masculinity was foregrounded as a focal point in the novel.

<sup>1</sup> Evelyn Fox Keller also makes this point in her work *Reflections on Gender and Science* (1985) in which she posits that science is not objective, but rather is infused with cultural assumptions concerning gender.



Lord Slane's masculine appearance afforded him the ability to control both public and private spaces. He was able to manipulate his position as a politician in the public sphere while relegating Lady Slane to the home because she was his wife and mother of his children. Likewise, Herbert's masculinity allows him to fill the position of patriarch in the family. No one appoints him to this position, but rather, it is a "natural" position to fill simply because he is a man and the oldest child. Indeed, he is, in a sense, being "hailed" by ideology (Althusser 162).

Lady Slane's appearance is also significant in the novel. Earlier in the text, she is described as being "[v]ery quiet, very distinguished, very old, very frail" (*APS*, 58).<sup>1</sup> As she talks to her children, the narrator states how the children "took her appearance for granted, but strangers exclaimed in amazement that she could not be over seventy...Duty, charity, children, social obligations, public appearances—with these had her days been filled." Lady Slane had been "[s]uch a wonderful help to her husband in his career!" (*APS*, 58-9) She is portrayed as being the support of her husband and not having an active role in the daily concerns of the family. From the day Lady Slane accepted Lord Slane's marriage proposal, everything has been planned out for her. Essentially, she adheres to the cult of true womanhood and a domestic ideology that includes wifedom and motherhood. As Lillian Faderman puts it, this was the only ideology available to women in the narrative.

Through the analysis of appearance, her children express how poorly they think of their mother. Because she is female and elderly (eighty-eight), her children believe their mother to have gone "mad" when she articulates that she wants to live alone and independently of her children (*APS*, 68). Lady Slane, however, realizes that she can carve out a space for herself because widowhood is a respectable social position. This freedom is unavailable to girls and younger women. Much like their father, the children believe their mother to be "simple" and "decided that old age had definitely affected her brain" (*APS*, 68). Only Kay and Edith seem to have positive thoughts about their mother after she discusses her living arrangements. The narrator states, "[Kay] had taken her so much for granted; they had all taken her so much for granted—her gentleness, her unselfishness, her impersonal activities—and now, for the first time in his life, it was becoming apparent to Kay that people could still hold surprises up their sleeves however long one had known them" (*APS*, 69). Edith is also insightful about her mother's feelings: "It now dawned upon Edith that her mother might have lived a full private life, all these years, behind the shelter of her affectionate watchfulness. How much had she observed? noted? criticized? stored up?" (*APS*, 69) It is interesting to note that Edith and Kay are the two children who are excluded and discounted in the discussions about their mother. Both are unmarried, and they realize that their plot position is insecure.

The novel employs the traditional "marriage plot" in determining Lady Slane's life trajectory. As the passages quoted above well illustrate, the woman in the "marriage plot" is bombarded by a number of expectations and assumptions that ultimately lead to the

<sup>1</sup> It is important to note that, later in the novel, Lady Slane is not thought of as being old and frail by other characters. Mr. Gosheron and Mr. Bucktrout see Lady Slane as an equal, regardless of her age and gender.

marriage ceremony: “It was *assumed* that she trembled for joy in his presence, languished in his absence” (APS, 155, emphasis added).<sup>1</sup> She is expected to be grateful to becoming married, bearing children, and submitting to the role of wife and mother. Sackville-West’s novel, however, provides the counter-narrative to the “marriage plot.” Although Lady Slane assumes a particular role in her marriage as “the good wife” (Ames 19) who does not thwart tradition, her conscious thoughts say otherwise about the gendered roles in marriage. To use Foucault’s theory of what is “*prohibited*” in society (216, original emphasis), culture projects a masculine discourse on what is deemed prohibited: “[s]uch was the unanimity of these assumptions that she was almost persuaded into believing *them* true” (APS, 155, emphasis added). Lady Slane never voices her opinions about marrying to her family and never objects to following through with the marriage because the ideology constructed through a masculine discourse does not allow her to do so. They do not envision Lady Slane possessing the ability to carve out a space for herself.

The gender differences found in the institution of marriage are foregrounded in Sackville-West’s text. The narrator relates how freedom and masculinity are inseparable components and that freedom is an essentially quality of masculinity.<sup>2</sup> In one of the most profound passages in the text, Lady Slane analyzes how freedom and masculinity afford men the ability to do as they please, both inside and outside of marriage:

She wondered sometimes what young men did, out in the world; she imagined them laughing and ruffling; going here and there, freely; striding home through the empty streets at dawn, or hailing a hansom and driving off to Richmond. They talked with strangers; they entered shops; they frequented the theatres. They had a club—several clubs. They were accosted by the importunate women in the shadows, and could take their bodies for a night into their thoughtless embrace. Whatever they did, they did with a fine carelessness, a fine freedom, and when they came home they need give no account of their doings; moreover, there was an air of freemasonry among men, based upon their common liberty, very different from the freemasonry among women, which was always prying and personal and somehow a trifle obscene....But everybody seemed agreed—so well agreed, that the matter was not even discussed: there was only one employment open to women. (APS, 153-4)

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1 Michel Foucault’s *The Archaeology of Knowledge and the Discourse on Language* (1972) provides an analysis of the social construction of language and its power to shape both speech and behavior: “We know perfectly well that we are not free to say just anything, that we cannot simply speak of anything, when we like or where we like; not just anyone, finally, may speak of just anything...speech may well be of little account, but the prohibitions surrounding it soon reveal its links with desire and power” (216). Indeed, language is infused with cultural acceptability, and Lady Slane merely becomes a cog in the system by not speaking her opinion because it simply was not sayable within the culture.

2 In Radclyffe Hall’s *The Well of Loneliness*, Stephen, the protagonist, makes note of her gender role juxtaposed against Roger Antrim’s masculinity and the freedom afforded to him because he was a boy.

Unlike men, who are able to move in and out of spaces both public and private without needing permission, women are fixed in space, primarily in the domestic sphere.

Lady Slane not only takes note of masculinity and freedom, but surveys the role of women in marriage and their subjugation. She highlights how Henry's life does not change after their marriage; it merely adds a wife to it. By contrast, her life changes completely. Henry continues to enjoy the privileges of masculinity, his career being one of them: "he would continue to enjoy his free, varied, and masculine life, with no ring upon his finger or difference in his name to indicate the change in his estate." The narrator articulates the subservience that Deborah experiences in her marriage: "...whenever he felt inclined to come home she must be there, ready to lay down her book, her paper, or her letters; she must be prepared to listen to whatever he had to say; she must entertain his political acquaintances; and even if he beckoned her across the world she must follow" (*APS*, 160). Lady Slane is clearly a victim of structural violence. It is the structure of the institution of marriage that allows Lord Slane to live a free life; Lady Slane's life, however, contrasts from his because she is a wedded woman and a mother. The social norms concerning marriage do not allow for any degree of separation from her family. And as this passage indicates, she bows to convention in her marriage because not to do so would be deemed unacceptable by society.

With gender aside, Lady Slane's class position affords her the ability to have her own home away from her family. If she were not wealthy (and white), she would not have been able to move out her current home into a new one. Moreover, she would not have been able to employ a maid to help with the daily chores. Lady Slane's character reflects the author of the novel, Sackville-West. In her double biography *Vita and Virginia*, Suzanne Raitt comments that not only did Sackville-West publicly endorse happy heterosexual marriage, but "she was also blatantly and unashamedly anti-working class; and very little of her published writing radically challenges conventional versions of femininity and female sexual pleasure (*All Passion Spent*...is perhaps an exception)" (10). Sackville-West's anti-working class sentiment does, however, penetrate the novel, especially when the narrator provides commentary. Keeping in mind that perhaps the narrator is the mouthpiece of the author, and the narrator and Lady Slane's perspectives parallel, a classist rhetoric begins to emerge. Lady Slane's social status allows her to make her own decisions in old age. Most importantly, her wealth allows her a sense of independence. She has the financial resources to purchase her own home away from her family and make a new life for herself in her remaining years. Because she is a woman, without financial independence she would not be able to live independently from her family. Concerning the working class, the narrator makes remarks about the caretakers: "[h]ow wrongly caretakers were named: they took so little care. A perfunctory banging about with black water in a galvanized pail, a dirty clout smeared over the floor, and they thought their work was done" (*APS*, 89). The narrator characterizes the working class, in particular caretakers, in a negative light. These statements belittle the work that caretakers perform, even perhaps hinting that caretakers are overpaid for their work. This is just one example in the novel that gives the reader a sense of Lady

Slane's class position in society and how she has been afforded the ability to break from her family in securing her own home.

The issue of education is also raised in the novel and provides another aspect of a class dimension. The use of French in the novel without translations also alludes to a readership of a particular class. Lady Slane's maid, Genoux, frequently speaks French in the novel and Sackville-West does not provide translations, but rather assumes the reader to know French. Clearly, the text has been demarcated for middle to upper class people as opposed to a working class reader who most likely cannot read French.

These examples illustrating Lady Slane's sentiment to the working class (in particular, caretakers) and the author's use of French in the novel without translations furthers my argument that a high social status position allowed Lady Slane to have independence. Without her financial resources, she would not have been able to carve out a space for herself separate from her family. If she were a working class woman, she would have had no other choice but to let her children take care of her. Her age of eighty-eight would not have allowed her such freedom in a working class position. Thus, a high class position, regardless of her gender, allows her much more freedom to exercise her financial independence. Indeed, ironically enough, Lady Slane's wealth enables her to make *her* choices to live independently. If she were a working class widow, she would not be able to live separately from her family and be able to support herself financially. Unless a woman was independently wealthy, she would not be able to live alone.<sup>1</sup>

The narrator's analysis of marriage is not unique to Sackville-West's novel. Virginia Woolf's novel *Orlando* also constructs an artificial connection between society and heterosexual marriage. To begin with, *Orlando* echoes this same sentiment of feeling alone and unwedded. Orlando notices Bartholomew's ring, and "instantly perceived what she had never noticed before—a thick ring of rather jaundiced yellow circling the third finger where her own was bare" (*Orlando*, 118). She notices the gold ring that has essentially marked Bartholomew physically as a married woman. Upon this recognition, Orlando asks Bartholomew to see her ring, Bartholomew becomes very upset "as if she had been struck in the breast by a rogue." She refuses to take the ring off her finger to see Orlando inspect the round circle of gold, to which Orlando concludes "that it was by the gleam on her wedding ring that she would be assigned her station among the angels and its lustre would be tarnished for ever if she let it out of her keeping for a second" (*Orlando*, 119).

When Orlando goes to dinner that evening, she notices the numerous wedding rings. Even in church, she makes note of them. They were "everywhere." In addition, she noticed a new practice among couples in the town:

In the old days, one would meet a boy trifling with a girl under a hawthorn hedge frequently enough...Now, all that was changed. Couples trudged and plodded in the middle of the road indissolubly linked together. The

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<sup>1</sup> Authors such as Vita Sackville-West, Virginia Woolf, and Radclyffe Hall were all wealthy women. They were also white and European; therefore, they were able to make choices in their lives that influenced their writing. The simple fact that these women are writing is another testament of their agency as wealthy individuals.

woman's right hand was invariably passed through the man's left and her fingers were firmly gripped by his. (*Orlando*, 119)

Orlando attempts to make sense of the phenomenon. In doing so, she “looked at the doves and the rabbits and the elk-hounds and she could not see that Nature had changed her ways or mended them, since the time of Elizabeth at least” (*Orlando*, 119). Orlando looks to nature to find what has changed, and as the passage indicates, nothing in nature has changed, but rather socially-constructed institutions. She makes the point that these institutions are not natural, but rather given privilege by society. *Orlando* parallels *All Passion Spent* when the narrator comments that Lady Slane “naturally” adopted the social perspective of her husband. The ironic tone of the narrator showcases that there is nothing natural about Lord Slane's viewpoint. Likewise, there is nothing natural about the social changes in England brought about with the dawning of the Victorian era, with all of its sexual modesty in tow.

Orlando's fixation on wedding rings causes her finger to have a physical reaction: “[h]er ruminations...were accompanied by such a tingling and twangling of the afflicted finger that she could scarcely keep her ideas in order” (*Orlando*, 120). In order to combat the tingling sensation, she purchases “one of those ugly bands and wear it like the rest” (*Orlando*, 120). Although she conforms to society, she is still not married; thus, the physical reaction in her unwed finger continues. This physical reaction causes her so much trouble that she cannot even continue to write: “she could feel herself poisoned through and through.” Therefore, she decides “to consider the most desperate of remedies, which was to yield completely and submissively to the spirit of the age, and take a husband” (*Orlando*, 120). The text illustrates the pervasiveness of ideology, particularly when accepting a particular ideology has social implications of acceptance.

In the following passage in *Orlando*, the narrator reiterates that Orlando's submission to the social paradigm concerning marriage “was much against her *natural* temperament” (*Orlando*, 120, emphasis added). The narrator goes on to explain Orlando's adherence to social standard in a most telling passage:

Such is the indomitable *nature* of the spirit of the age...that it batters down anyone who tries to make stand against it far more effectually those who bend its own way. Orlando had inclined herself *naturally* to the Elizabethan spirit, to the Restoration spirit, to the spirit of the eighteenth century, and had in consequence scarcely been aware of the change from one age to the other. But the spirit of the nineteenth century was antipathetic to her in the extreme, and thus it took her and broke her, and she was aware of her defeat at its hands as she had never been before. For it is probably that the human spirit has its place in time assigned to it; some are born of this age, some of that; and now that Orlando was grown a woman, a year or two past thirty indeed, the lines of her

character were fixed, and to bend them the wrong way was intolerable.  
(*Orlando*, 120, emphasis added)

Once again, the text reiterates a dichotomy between what the protagonist naturally feels and what a masculine discourse deems as normal. Orlando easily accepted the social norms and customs of previous eras, but the Victorian era strikes her with much apprehension. The protagonist notices the paradigm shift from a liberal era to very much a conservative era based on principles of modesty and respectability for woman. The last sentence of the passage indicates the social role that Orlando will be subjected to because of her gender. Any divergence from “her character” would not be acceptable. Indeed, it is not coincidental that Virginia Woolf structured the novel in a way that foregrounds the social roles of women in the Victorian era. If the protagonist were a man (as in the earlier parts of the novel), Orlando would have been subjected to a much different set of rules, one that emphasized public space and pursuit of a career.

The “spirit of the age” emphasized heterosexual marriage, particularly for women, as their limited professions of wife or spinster. Orlando realizes that she is without a partner and not “mated” like everyone else. Later in the passage, Orlando describes herself as “single,” “mateless,” and “alone” (*Orlando*, 122). The narrator tells us that “[s]uch thoughts had never entered her head before. Now they bore her down unescapably” (*Orlando*, 122). Try as she might, Orlando cannot thwart Victorian ideology. This causes the protagonist great anxiety: “[a]t every step she glanced nervously lest some male form should be hiding behind a furze bush or some savage cow be lowing its horns to toss her” (*Orlando*, 122).

Walking in the woods, Orlando experiences nostalgia of what her life was like before the present and how she found comfort in nature. Then, she begins to experience a “strange ecstasy” “of following the birds to the rim of the world and flinging herself on the spongy turf and there drinking forgetfulness, while the rooks’ hoarse laughter sounded over her” (*Orlando*, 122). She begins to run and trips, breaking her ankle. Not being able to get up, Orlando continues to lie on the ground. There she declares that she has “found [her] mate...It is the moor. I am nature’s bride...Here will I lie...” During her dream she takes off her wedding ring. She describes how she has never been able to find love from men or women and that “death is better” (*Orlando*, 123). She continues her fantastic vision of being a part of nature until she hears a man on horseback nearby. When the man notices that she is hurt, she replies, “I’m dead, sir!” Then, the two become mysteriously engaged (*Orlando*, 123).

The text portrays a different life trajectory for the protagonist Orlando, but it is wholly unsuccessful because Orlando becomes domesticated by eventually marrying Shelmerdine. Orlando wants to be “nature’s bride” and live with nature, but a man’s entrance, which sparks the instant engagement in the novel, interrupts her dream. Orlando imagines a different pathway for herself, but it is not socially acceptable; therefore, a man must come and rescue her from her own willful divergence from social convention.

Orlando, like Lady Slane’s children, is clearly being inculcated with cultural and social values of partnering in heterosexual marriage in order to avoid loneliness. However, unlike



Woolf's character who embodies these feelings of loneliness, Sackville-West's Lady Slane never feels lonely or unhappy because she is a widow, but rather she seems elated her husband has died. This is plausible because we are never shown Lady Slane in mourning for her husband; therefore, she is to be relieved of her duties as a wife.

Not surprisingly, *All Passion Spent* breaks generic boundaries and expectations. Critics rarely analyze one of the most important aspects of the novel--- the friendship between Lady Slane and Genoux. It deserves much attention in re-envisioning an exclusive female space. The relationship between the two women exemplifies Raitt's contention that the novel "does close on a gift between women, and on an affirmation of women's intimacy" (113). As Sharon Marcus puts it, "[w]omen drew clear distinctions between the love felt for a friend and for a spouse and often articulated their belief that marriage demanded unique feelings of love that went beyond even the warmest friendly devotion" (66). By reading the text with Adrienne Rich's notion of the lesbian continuum in mind, the reader can perhaps discern an exclusive female space that is created with Lady Slane's independence from her former home. Rich's lesbian continuum focuses on woman-identified experiences, both sexual and non-sexual, in order to broaden our sense of the full range of women's experiences, especially woman-centered experiences, on a continuing scale. The continuum is not confined to simply homosexual experiences, but also heterosexual ones. Few critics have focused on the significance of the relationship between Lady Slane and her maid Genoux and the lesbian connections that abound, not in sexual terms, but in female friendship and exclusive female space. A key passage illustrates the importance of this lesbian relationship:

She and Genoux, living in such undisturbed intimacy, bound by the ties respectively of gratitude and devotion bound also by the tie of their unspoken speculation as to which would be taken from the other first. Whatever the front door shut behind one of their rare visitors, each was conscious of a certain relief at the departure of intruders. The routine of their daily life was all they wanted—all, indeed, that they had strength for. Effort tired them both, though they had never admitted it to one another. (*APS*, 190)

Several male characters visit (Mr. Bucktrout, Mr. Gosheron, and Mr. FitzGeorge), but only Lady Slane and Genoux live in the home. Even when later a third woman, Deborah (Lady Slane's great-granddaughter), joins this exclusive female space, the lesbian space still thrives and leaves a steady pulse for the novel's entirety. The relationship between Lady Slane and Genoux benefits both women, not only on the level of maintaining a well-kept home, on Genoux's part, or providing an income, on Lady Slane's behalf for Genoux, but also in the company they provide each other. Genoux takes care of her and provides a constant companion for Lady Slane, even until her death.

When Deborah, her granddaughter, enters Hampstead, she reinforces the exclusive female space. Although Lady Slane defiantly states that no grandchildren are allowed to visit, she permits Deborah to visit her in Hampstead. Deborah broke off an engagement,

much to the disappointment of her family. Instead, she wants to pursue a career as a musician. Unlike Lady Slane, Deborah goes against the grain rather than becoming lost in the ideological assumptions of cultural conventions. She rejects the traditional marriage plot; instead, she follows her own desires and dreams rather than capitulating to society's expectations. Lady Slane sees herself in Deborah when she was her age. The two women share more than just a common name, but also a similar life trajectory. For example, Lady Slane wanted to be an artist and her granddaughter wanted to be a musician. The protagonist did not have the courage to end her engagement with Lord Slane, but feels optimistic that Deborah will not make the same mistakes that she did and break the cycle of perpetual matrimony.

Both Lady Slane and Deborah exemplify Carol Ames's contention that "*All Passion Spent* says that, for women, breaking tradition and rebelling are necessary" (20). Indeed, in order to thwart society's stifling expectations and cultural traditions, the two women must break from the established order. Patriarchal society does not grant value to women who reject patriarchal rule; thus, Lady Slane, during her marriage, had to play a role that did not allow her to form her own identity. Likewise, her granddaughter Deborah will soon find out the difficulties of carving out a space for herself.

This discussion of the narrator, gender roles, Lady Slane's subjugation in a patriarchal marriage, and the creation of lesbian space in *All Passion Spent* demonstrates that Sackville-West's novel addresses issues concerning gender roles that are created by adhering to tradition and ideology as opposed to going against the grain in society, in particular, roles in marriage. An understanding of these roles is crucial to any discussion of late-nineteenth, early twentieth-century gender regimes. The novel deserves greater recognition for exposing ideological assumptions in the institution of marriage and the structural violence that is done to women in this institution. Indeed, whether or not it was Sackville-West's intention, the novel elicits a strong feminist discourse in order to undermine the patriarchal values of the culture. Moreover, *All Passion Spent* carves out a space for those women who recognize that their role in a marriage is merely to serve as an appendage rather than an equal partner in a mutually giving relationship. As Lady Slane's character suggests, only through active participation in one's life can one be truly happy and independent.



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## Impact of Three-week Educational Program on Low Back Flexibility and Pain in College Students

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### **Abstract**

**Purpose:** The purpose of this study was to document the effectiveness of a three-week educational program on low back flexibility and pain reduction in college students between the ages of 18 and 30 who are at risk for low back pain. **Methods:** Fifty college students were assigned to either an experimental group that participated in a three-week educational program or a control group. Subjects were assessed pre- and post-intervention using the following outcome measures: Oswestry® Low Back Pain Disability questionnaire, the Fitnessgram® Back Saver Sit and Reach test, and pre- and post-low back pain survey. **Results:** The majority of students decreased in low back pain and felt that the educational program was beneficial in preventing and delaying low back pain. A repeated measures ANOVA revealed that there was no significant interaction between groups over time in low back flexibility and pain intensity,  $p > 0.5$ . **Conclusion:** An educational program for college students that increases low back flexibility and decreases pain will prevent or delay low back pain among college students.

## INTRODUCTION

Low back pain (LBP) is the second most common ailment in the United States affecting sixty to eighty percent of the American population any given year.<sup>2</sup> Previous studies have indicated the first episode of LBP occurs between the ages of 25 and 55.<sup>4</sup> LBP takes place in the lumbar vertebrae where the vertebrae carry the majority of the body's weight and endure a high amount of stress.<sup>2</sup> Typically, episodes of LBP are acute and non-specific. LBP duration can be categorized as acute (<6 weeks) and chronic (>12 weeks), and it is defined as specific (i.e. fracture, tumor, infection, or bulging disc) or non-specific, which implies there is not a clear, specific cause.<sup>5,6</sup> The majority of LBP experiences can be prevented or delayed with improvements in posture, exercise, and other lifestyle habits.<sup>7</sup> With these types of improvements in mind, we have striven to create an educational program that will provide students with information to prevent or delay subsequent episodes of LBP.

Risk factors for low back pain are aging, lack of physical fitness, weakness of back and abdominal muscles, smoking, obesity, low educational level, high levels of pain and disability, stress, and anxiety.<sup>6</sup> Occupational risk factors that account for most low pain experiences are manual handling, bending, twisting, whole body vibration, monotonous tasks, poor work relationships, and heavy lifting.<sup>6</sup> Effective, conservative treatments for low back pain intervention are light to moderate activity, non-steroidal anti-inflammatory drugs (NSAIDs), muscle relaxants, analgesics, exercise therapy, behavior therapy, spine manipulation, and multidisciplinary programs.<sup>6</sup> In hopes of decreasing risk factors for students and increase the effectiveness of treatment students seek preventive methods that are conservative and effective such as an educational program.

As described in *Prevention and Treatment of Acute Low Back Pain: Physical Therapy and Other Non-surgical Methods*, we found that Middle Tennessee State University students were experiencing LBP as early as 18 years old and preferred conservative treatment. Although there is evidence that low back education and conservative treatment are effective,<sup>4</sup> this study seeks to measure the effectiveness of a three-week LBP education program. The program consists of lectures describing posture management, exercises, and activities. Assessment of the program, including students between the ages of 18 and 30 that are at risk for LBP, is through the analysis of pre- and post-program surveys. We will also use a secondary measurement to evaluate the effects of the program on hamstring flexibility with the Fitnessgram<sup>®</sup> Back Saver Sit and Reach test and level of back pain with the Oswestry<sup>®</sup> Low Back Pain Disability questionnaire.

## METHODS

### *Subjects*

Fifty-two students participated in the study which received approval from Institutional Review Board of Middle Tennessee State University. Volunteers were recruited from Dr. J. Angela Hart-Murdock's classes. Subjects were separated into a control group and an experimental group. Students were excluded from the study if they were not between the ages of 18 and 30 or had an Oswestry<sup>®</sup> Disability Index score of >40%.

### ***Eligibility Screening***

#### ***Oswestry© Low Back Pain Disability Questionnaire***

For 25 years, the Oswestry© Low Back Pain Disability questionnaire has been considered the “gold standard” for measuring low back pain functionality.<sup>8</sup> Students completed the questionnaire assessing their pain intensity in nine modalities: while standing, conducting personal care, performing sexual acts, sleeping, lifting, walking, sitting, traveling, and socializing. Subjects were included in the study if their pain score was  $\leq 40\%$ , implying that the students were categorized as having minimal or moderate disability. Under these criteria subjects experience low back pain, but daily living is not affected.

### ***Procedures***

#### ***Fitnessgram© Back Saver Sit and Reach***

The Fitnessgram© Back Saver Sit and Reach has been shown to accurately measure hamstring flexibility but cannot be used to measure low back flexibility. The objective of the test is to measure the ability of subjects to reach a specified distance on the right and left sides of the body. The student’s highest measured distance was recorded to the nearest fourth an inch. Six students (three men and three women) chosen randomly from each group completed the sit and reach test.

### ***Low Back Pain Surveys***

Prior to the lectures, both the control and experimental group completed the LBP survey (Figure 1) providing information on age, experiences of LBP, posture while sitting, sleeping, standing, and lifting, and exercise history. After the experimental group completed the educational program, both groups completed another survey (Figure 2) to conclude if LBP experiences changed after completing the educational program.

### ***Low Back Prevention Worksheet***

After completing the educational program, the experimental group was provided a LBP prevention worksheet (Figure 3) that served as an overview of the lectures. The worksheet included proper posture and body mechanics, stretching and strengthening exercises, and moderate to low risk physical activities. The worksheet was given to all students for those who may have missed a lecture or did not comprehend the material during the lectures.

## **INTERVENTION**

Fifty-two students were separated into the control and experimental group. The control group consisted of 23 students, and the experimental group consisted of 29 students. The control and experimental groups completed the LBP survey and Fitnessgram© Back Saver Sit and Reach test. The experimental group completed a three-week LBP educational program. Subjects in the control group were informed about the study, but were not given instructions on how to prevent or delay LBP. Both groups were reassessed and retested with

the low back pain LBP questionnaire and the back saver sit and reach at the conclusion of the study.

The experimental group received a 10 -20 minute lecture once a week for three weeks. The objective of the lectures was to provide students with the knowledge to prevent or delay LBP. The lectures included information regarding LBP prevalence, forms of conservative treatment for LBP, proper posture management while sitting, driving, lifting, and sleeping, strengthening and stretching exercises that targeted low back muscles, abdominal muscles, back extensors, hip extensors, and leg muscles, and physical activities. The lectures also included videos that demonstrated the how to sit while driving and how to properly pick up an object and included pictures on proper postures and exercises. After completing the LBP educational program, students were given a LBP prevention worksheet to help retain the information from the lectures.

### ***Data Analysis***

Descriptive statistics were calculated on all students to determine personal characteristics (Tables 1 and 2). Chi-square tests were performed to determine whether relationships existed on the basis of experiencing LBP while sitting, sleeping, standing, and lifting with the number of hours of sitting during the day, knowledge about proper postures for sitting, sleeping standing, and lifting, and improvement of postures for sitting, sleeping, standing, and lifting after completing the three-week educational program using a level of significance accepted at  $\alpha=.05$  (Table 3). The Fitnessgram® Back Saver Sit and Reach flexibility scores and Oswestry® Low Back Pain Disability questionnaire pain scores from the control and experimental groups were compared with an Analysis of Variance (ANOVA) with two repeated measures using a level of significance accepted as  $\alpha=.05$ .

## **RESULTS**

### ***Descriptive Analysis***

Fifty-two college students participated in this study. Ten of the 52 students did not complete the post-LBP survey. The majority of the students were male that completed the study, and forty-one of the forty-two students that completed the study experienced low back pain (Table 2). After the three-week educational program, 63.34% of the students indicated LBP decreased compared to 42.11% decreased in LBP in the control group (Table 2). Using chi-square analysis, we could not reject the null hypothesis of independence of the following factors: experience of LBP when sitting and knowledge of proper sitting posture, experience of LBP when standing and knowledge of proper standing posture, experience of LBP when lifting and knowledge of proper lifting posture, experience of LBP when sitting and improvement of sitting posture, experience of LBP when sleeping and improvement of sleeping posture, experience of LBP when standing and improvement of standing posture, and experience of LBP when lifting and improvement of lifting posture (Table 3). However, we conclude experience of LBP is not independent of the number of

hours a person is seated per day and experience of LBP when sleeping is not independent of knowledge of the proper standing posture (Table 3).

#### *Fitnessgram® Back Saver Sit and Reach*

A repeated measures ANOVA was conducted to determine differences between the experimental and control groups in flexibility scores. As shown in Figure 4, there was no statistically significant interaction ( $p>0.5$ ) between group and time relative to flexibility score. There was no significant effects for group or time with respect to flexibility score (Figure 4).

#### *Oswestry® Low Back Pain Disability Questionnaire*

A repeated measures ANOVA was conducted to determine differences between the groups in low back pain scores. As shown in Figure 5, there was no statistically significant interaction ( $p>0.5$ ) between group and time relative to pain score. There was no significant effects for group or time with respect to pain score (Figure 5).

## **DISCUSSION**

The three-week educational program used in this study appears to be effective in decreasing number of experiences of LBP among college students between the ages of 18 and 30. The educational program's purpose was to inform students of LBP prevalence, forms of conservative treatment for LBP, proper posture management while sitting, driving, lifting, and sleeping, strengthening and stretching exercises that targeted low back muscles, abdominal muscles, back extensors, hip extensors, and leg muscles, and physical activities. The students attended one 10-20 minute lecture every week for three weeks.

Prior to the intervention, the majority of the students experienced LBP in the control and experimental groups (Table 1). After completing the three-week educational program, a majority of the experimental group decreased in LBP and felt that the three-week educational program was beneficial in preventing LBP (Table 2). The majority of the control group did not decrease in LBP (Table 2). Although when using chi-square analysis we could not reject the null hypothesis for a majority of the relationships, we could conclude that experience of LBP is not independent of the number of hours a person is seated per day, and experience of LBP when sleeping is not independent of knowledge of the proper standing posture (Table 3).

Although the repeated measures ANOVA performed on the Fitnessgram® Back Saver Sit and Reach flexibility scores and Oswestry® Low Back Pain Disability questionnaire pain scores showed no statistically significant change within or between groups, there was a trend for improvement in flexibility and LBP between pre- and post-testing for the control group. The experimental group did not improve flexibility scores or LBP scores. This trend implied that the three-week educational program did not increase low back flexibility nor decrease level of pain for college students. Although speculative, the lack of

effectiveness may be due to the short duration of the study and to the small sample size used for statistical analysis (ANOVA).

## **CONCLUSION**

Interventions that help delay and prevent LBP among college students are essential, and educational programs may be an effective option. Future studies should increase the sample size of the experimental and control groups, increase the length of the education program, and require active participation during the education program by having students perform exercises and practice proper postures. Although students reported when they experienced LBP by completing the pre-program LBP survey, students should record their experiences of LBP in a journal during future educational programs.

A three-week educational program did not appear to have an impact on low back flexibility and pain intensity, however the majority of students from the experimental group believed the program was beneficial in preventing low back pain. An education program for college students that increases low back flexibility and decreases pain could prevent or delay low back pain among college students.

## **ACKNOWLEDGEMENTS**

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## APPENDIX

Figure 1. Low Back Pain Pre-Survey

### Low Back Education Survey 1

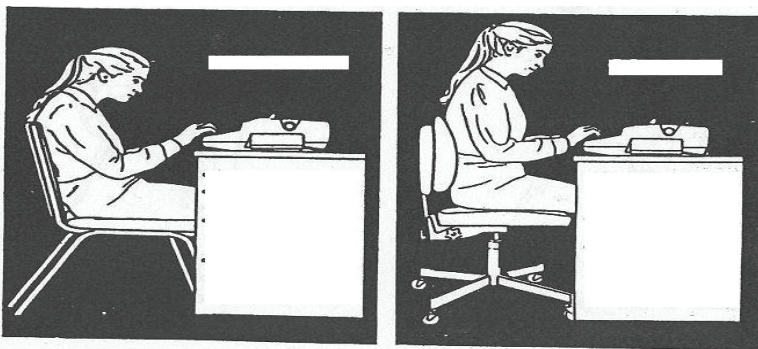
The purpose of this study is to survey students between the ages of eighteen and sixty years old to determine the education levels of students about low back prevention methods.

For additional information about giving consent or your rights as a participant in this study.

#### Directions

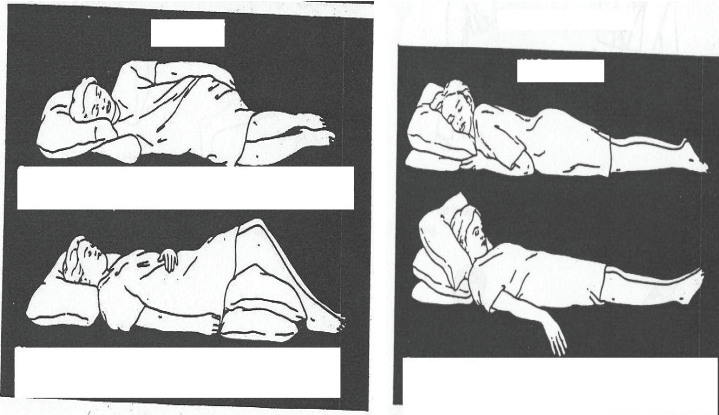
Please answer all questions. Please ask me any questions if you have any problems.

1. Age \_\_\_\_\_
2. Sex     Male     Female
3. Race     American Indian or Alaskan Native     White     Hispanic/ Latino  
 Asian, Pacific Islander, or Hawaiian native     African American or Black     Other
4. Have you ever experienced back pain?     Yes     No
5. How often do you experience low back pain?     Daily     Weekly     Monthly
6. Do you experience low back pain when sitting?     Yes     No
7. How long do you sit during the day? (i.e. during class, while driving, etc.)  
 1-2 hours     3-4 hours     5-6 hours     7 or more hours
8. Circle the correct sitting posture and box the sitting posture that you find yourself in the most.



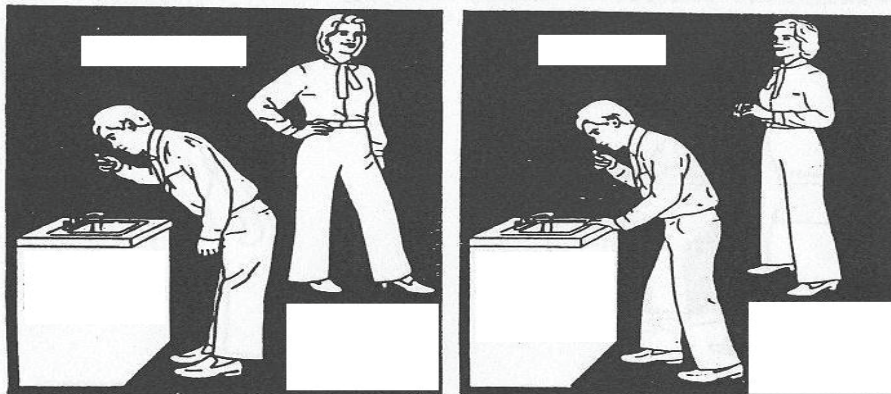
9. Do you experience low back pain when sleeping?     Yes     No

10. Circle the correct sleeping posture and box the sleeping position that you find yourself in the most.



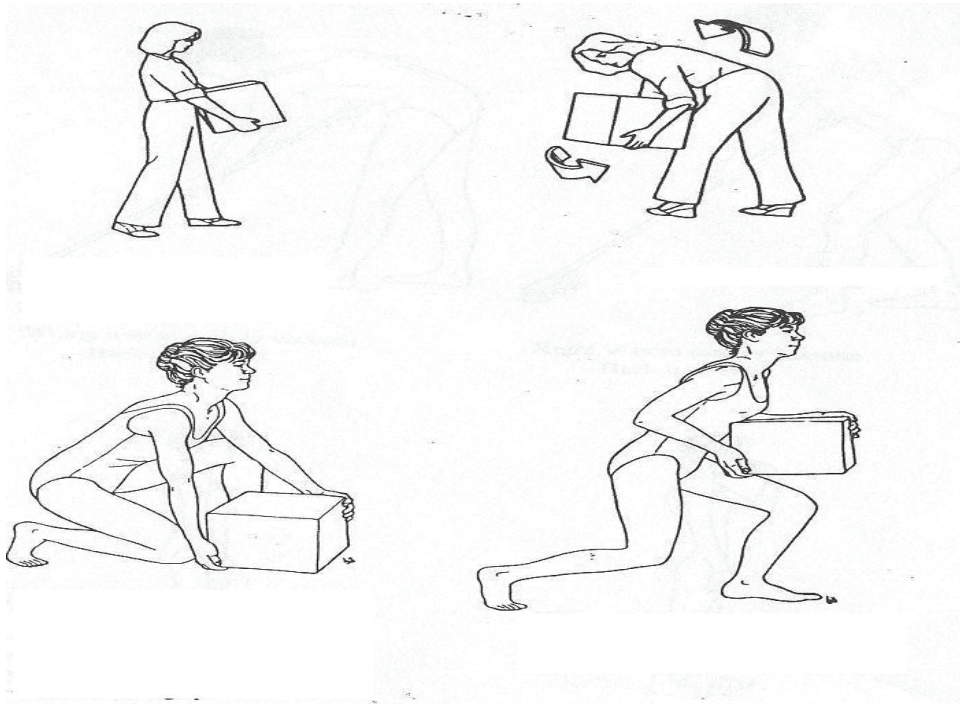
11. Do you experience low back pain while standing? Yes No

12. Circle the correct standing posture and box the standing position that you find yourself in the most.



13. Do you experience low back pain while lifting? Yes No

14. Circle all of the correct lifting postures.



15. You experience low back pain more when  Sitting  Sleeping  Standing  Lifting

16. How often do you exercise within a week?  
 0-1 days  2-3 days  4-5 days  6-7 days

17. Does your exercise program include exercises that strengthen or stretch your abdominal muscles?  Yes  No

18. Do you feel behavioral changes will prevent or delay low back pain?  Yes  No

**Figure 2. Low Back Pain Post-Survey****Low Back Pain Education Survey 2**

The purpose of this study is to survey students between the ages of eighteen and sixty years old to determine if the low back pain education lecture delayed or prevented experiences of low back pain for students.

For additional information about giving consent or your rights as a participant in this study.

**Directions**

Please answer all questions. Please ask me any questions if you have any problems.

1. Age \_\_\_\_\_
2. Sex     Male    Female
3. Race     American Indian or Alaskan Native     White     Hispanic/ Latino  
 Asian, Pacific Islander, or Hawaiian native     African American or Black     Other
4. Did you improve your posture when sitting?     Yes     No
5. Did you improve your posture when sleeping?     Yes     No
6. Did you improve your posture when standing?     Yes     No
7. Did you improve your posture when lifting?     Yes     No
8. Have your experiences of low back pain lessened?     Yes     No
9. Do you feel improving posture lessened your experiences of low back pain?  
 Yes     No
10. Have you increased how many times you exercise within a week?     Yes     No
11. Do you include exercises that strengthen or stretch your abdominals?     Yes     No
12. Do you feel that the lecture was beneficial to you in preventing low back pain?  
 Yes     No

Figure 3. Prevention of Low Back Pain Worksheet

## Prevention of Low Back Pain

During a given year, 60-80% of Americans will experience an episode of low back pain. The first episode low back pain occurs between the ages of 25 and 60 years old. With the proper posture mechanics and stretching and strengthening exercises, you can prevent or delay low back pain.

### Proper Posture Mechanics

#### Standing or Walking

- Stand with lower back erect and flat
- Avoid standing for long periods of time
- Do not stand with hands supporting weight

#### Driving

- Lower back erect
- Knees are higher than your hips
- Never sit for a long time

#### Sitting

- Sit with back flat
- Knees should be higher than hips
- Stop every 30-60 minutes to walk or stretch


#### Lifting

- Let legs do most of the work
- Hold object close to the body
- Never lift with legs straight


#### Sleeping

- Sleep on flat, firm mattress
- Sleep on side with both arms in front and knees slightly drawn up toward chin
- When lying on back, place pillows under knees


### Stretching and Strengthening Exercises





**Pelvic Tilt**-Stretches Abdominal Muscles




**Double Knees to Chest**-Stretches Hip, Buttock. And Lower Back




**Trunk Flex**- Stretches Back, Leg, and Abdominal Muscles




**Single Leg Extension**-Stretches Abdominal Muscles and Strengthens Hip and Buttock Muscles



**Partial Sit Up**-Strengthens Low Back and Abdominal Muscles

**Standing McKenzie Exercise**- Stretches Abdominal Muscles Strengthens Back Extensors



### Moderate to Minimal Risk Activities

- \*Hiking
- \*Swimming
- \*Walking
- \*Water Aerobics
- \*Yoga

- \*Pilates
- Jogging
- Horseback Riding
- Backpacking
- Baseball

- Basketball
- Bowling
- Golf
- Ice-Skating
- Softball

\*Minimal Risk Activities

#### Stretching Dos and Don'ts

**Do-**

- ✓Stretch at least 3 days a week
- ✓Hold stretch for 10 to 30 seconds
- ✓Repeat each stretch 10 times

**Don't-**

- ✓Stretch without warming up( light walk or run)
- ✓Bounce
- ✓Hold painful positions
- ✓Hold your breath



Table 1. Pre-Program Personal Characteristics for Participants

Pre-Personal Characteristics	Control (n)	Experimental (n)	Control (%)	Experimental (%)
<b>Sex</b>				
Male	11	10	52.17	65.52
Female	12	19	47.83	34.48
<b>Race</b>				
White/Caucasian	18	18	78.26	55.17
Black/African-American	4	7	17.39	31.03
Hispanic/Latino	0	3	0	10.35
Asian/Pacific Islander/ Hawaiian native	0	1	0	3.45
Other	1	0	4.34	0
<b>Experience LBP</b>				
Yes	22	27	95.65	93.10
No	1	2	4.35	6.90
<b>Frequency of LBP</b>				
Daily	4	5	19.05	18.51
Weekly	1	8	4.76	29.63
Monthly	16	14	76.19	51.85
<b>Frequency of Exercise</b>				
0-1 day	4	9	18.18	31.03
2-3 days	11	12	50.00	41.38
4-5 days	4	7	18.18	24.14
6-7 days	3	1	13.64	3.45

*Table 2. Post-Program Personal Characteristics for Participants*

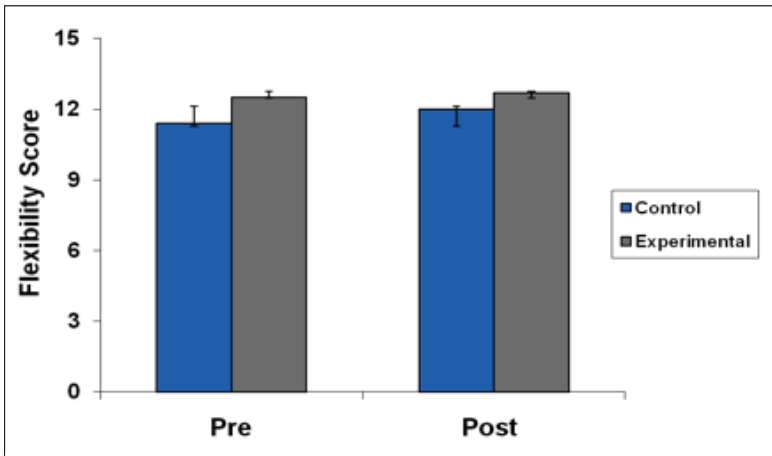
<b>Post-Personal Characteristics</b>	<b>Control (n)</b>	<b>Experimental (n)</b>	<b>Control (%)</b>	<b>Experimental (%)</b>
Sex				
Male	9	7	47.37	30.43
Female	10	16	52.63	69.57
<b>Race</b>				
White/Caucasian	14	17	73.69	73.91
Black/African-American	4	4	21.05	17.39
Hispanic/Latino	0	1	0.00	4.35
Asian/Pacific Islander/ Hawaiian native	0	1	0.00	4.35
Other	1	0	5.26	0.00
<b>Experience LBP</b>				
Yes	19	22	100.00	95.65
No	0	1	0.00	4.35
<b>LBP Decreased</b>				
Yes	8	14	42.11	63.64
No	11	8	57.89	36.36
<b>Exercise Increased</b>				
Yes	7	11	36.84	50.00
No	12	11	63.16	50.00
<b>Lecture Beneficial</b>				
Yes	N/A	21	N/A	95.45
No	N/A	1	N/A	4.55



*Table 3. Results of Chi-Square Testing for Independence in Experimental Group*

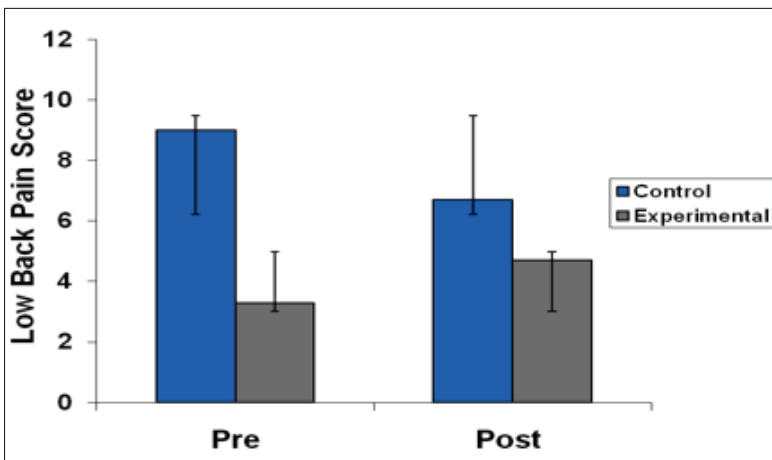
<b>Factors</b>	<b>Chi-Squared Value (<math>\chi^2</math>)</b>	<b>Degrees of Freedom (df)</b>	<b>Cut Off Value (<math>\alpha=.05</math>)</b>
Experience of LBP and Amount of Sitting per Day	6.365	2	5.911
Experience of LBP Sitting and Sitting Posture	0.089	1	3.841
Experience of LBP Sleeping and Sleeping Posture	6.390	1	3.841
Experience of LBP Standing and Standing Posture	0.244	1	3.841
Experience of LBP Lifting and Lifting Posture	0.024	1	3.841
Experience LBP Sitting and Improved Sitting Posture	1.317	1	3.841
Experience LBP Sleeping and Improved Sleeping Posture	1.498	1	3.841
Experience LBP Standing and Improved Standing Posture	0.176	1	3.841
Experience LBP Lifting and Improved Lifting Posture	1.011	1	3.841

Figure 4. Fitnessgram Back Saver Sit and Reach Flexibility Scores



\*Significant interaction of flexibility intervention by time,  $p>0.5$

Figure 5. Oswestry Low Back Pain Disability questionnaire Pain Scores



\*Significant interaction of flexibility intervention by time,  $p>0.5$

## **An Evaluation of the Alcohol Consumption Patterns of Tailgaters at Greenland Drive and Walnut Grove, Middle Tennessee State University, Murfreesboro, Tennessee**

*Joseph L. Keasler and Thomas Gildemeister*

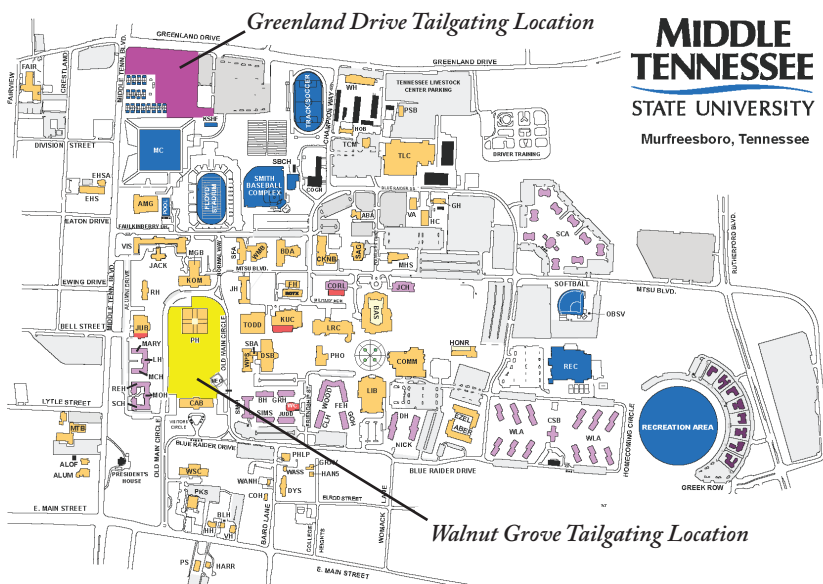
### **Abstract**

*This study was conducted as an exercise in garbageology, which is the study of society through the analysis of its garbage. The researchers looked at differences and similarities between two tailgating locations, Greenland Drive and Walnut Grove, on Middle Tennessee State University's campus. The data showed evidence of large amounts of alcohol use at both sites with one being greater than the other. The data also showed evidence of one group of people being more affluent than the other group. Overall, the interpretation would suggest the two groups of people were using the sites in a ritualistic manner and not as a permanent settlement. The high amounts of alcohol use and small amounts of food waste would indicate the people were more interested in becoming intoxicated than with the event associated with the site use. While this was less evident at Greenland Drive, the numbers there were still high. Observations at Walnut Grove indicate that many of the participants were likely under the legal drinking age. The research indicates a need to re-evaluate the wisdom of sponsoring such events on a college campus.*

## INTRODUCTION

What is it about competition that brings out our aggressive nature? From the Greek Olympians to the Roman gladiators, as spectators we have always craved the shock and awe that these competitive sports bring. With modern day gladiatorial games, our culture has no problem filling a stadium with thousands of screaming fans who would seem, to an outsider, to be out for blood. Since the inception of American football as a sport, people have arrived early to the game to gather with friends and family to show their support for the home team (Tailgating 2005). Football is also a sport enjoyed by a wide diversity of people from different backgrounds and social standings (Falk 2005). It is for these reasons we chose to do our garbology analysis at Middle Tennessee State University (MTSU), as shown in Figure 1 below, during a home football game using two different tailgating locations.

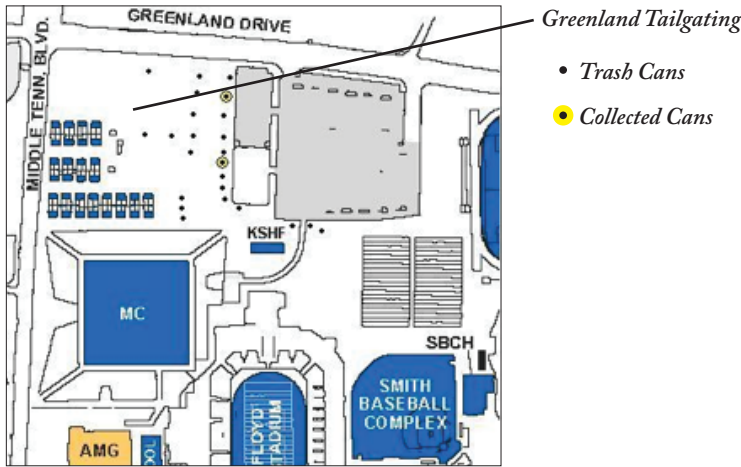
Figure 1. Map of Middle Tennessee State University ([http://www.mtsu.edu/rootpage\\_files/MTSUCampusMap.pdf](http://www.mtsu.edu/rootpage_files/MTSUCampusMap.pdf), pg. 2)



The study will attempt to determine if there is a discernable difference in what one group is throwing away compared to the other. Do signs of affluence exist in this environment or do spectator events such as this bring out common human traits with no regard for social ranking? Is one group more prone to drunken debauchery over the other? William Rathje, director of The University of Arizona's Garbage Project, states that "If our garbage, in the eyes of the future, is destined to hold a key to the past, then surely it already holds a key to the present" (Rathje and Murphy 2001: 11). How would future archaeologists view the people from these two sites? These are the questions this study will attempt to answer.

The first location we evaluated was the large grassy area on Greenland Drive, just northwest of Floyd Stadium, which is shown in Figure 2.

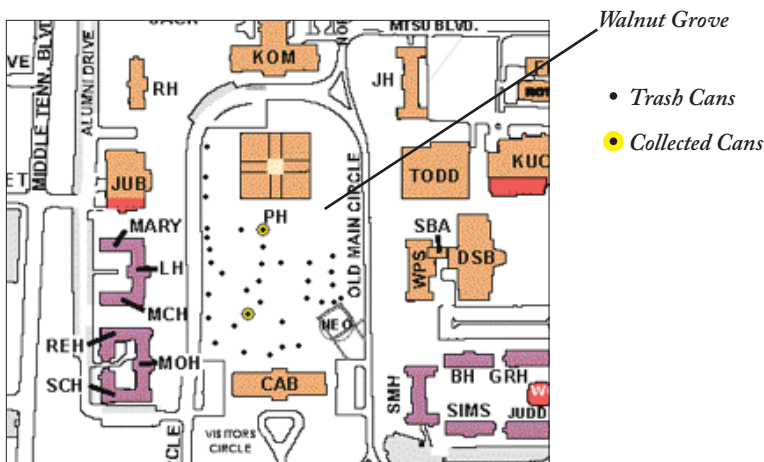
Figure 2. Detail of Greenland Drive collection site ([http://www.mtsu.edu/rootpage\\_files/MTSUCampusMap.pdf](http://www.mtsu.edu/rootpage_files/MTSUCampusMap.pdf), pg. 2, revised by authors)



This area is reserved for members of the Blue Raider Athletic Association. To be a member you must make monetary contributions to the MTSU Athletic Department every year. According to their website, a donation of \$125.00 will allow you to park in the Greenland lot and a donation of \$10,000.00 will give you a “special reserved and personalized” parking space (Blue Raider Athletic Association). From this information it would appear that the people using this site are amongst the more affluent members of the community. They would need to have higher than average incomes to afford the yearly donations required to tailgate in this area. This study proposes that the data will support this assertion.

The second area of interest on campus is Walnut Grove, which is a large tree-filled area south of Floyd Stadium as shown in Figure 3.

Figure 3. Detail of Walnut Grove collection site ([http://www.mtsu.edu/rootpage\\_files/MTSUCampusMap.pdf](http://www.mtsu.edu/rootpage_files/MTSUCampusMap.pdf), pg. 2, revised by authors)



The Walnut Grove area is used as a tailgating location for faculty and fraternities, as well as students and their families. Walnut Grove is most heavily used during a tailgating event. Throughout the year, it is only used a handful of times for other special events. Many students use the area to study or have lunch the remainder of the time. Since this area is so heavily used by students during a tailgating event, as observed from the many fraternity and student organization functions taking place, this study proposes that there will be higher levels of alcohol use and evidence of a lesser quality of alcohol than at the Greenland site.

## **THE SITES**

There are two main areas on campus that are used for tailgating during MTSU home football games. One is the Greenland Drive area and the other is Walnut Grove. The Greenland lot is reserved for donors to the MTSU Athletic Department. The Walnut Grove area is used by members of the general public, MTSU fraternities, academic departments, and students.

The Greenland Drive tailgating area is located in the grass field between the parking lot and the tennis courts at the corner of Greenland Drive and Middle Tennessee Boulevard. The area's approximate dimensions are 550 feet by 350 feet. There were twenty-four 55-gallon drums lined with trash bags for waste collection at the site. The area appeared to be neat and well-kept and there was no noticeable trash on the ground. It was also noted that along the edge of the parking lot and the grass field, there were electrical hook-ups for RV's to connect for power. The weather during collection was clear with a temperature in the 60's and low humidity. There was no sign of recent rainfall as the ground was dry and hard packed.

The Greenland Drive area of MTSU's campus is rarely used for any other activity throughout the year. There are sidewalks that skirt the perimeter of the area, but none that cross through the field itself. There are no trash cans, benches, or picnic tables in the area for students to use at any other time. The only reason a student might cross this field is to use it as a shortcut onto campus or to the tennis courts. Since this area is used by MTSU alumni and donors to the athletic department, we hoped to see a higher quality of waste in the trash collected. We expected to see evidence of alcohol use and large quantities of food related waste, much like a large family reunion. The study hypothesized that the data would show the Greenland Drive tailgating area to be more affluent than the Walnut Grove area.

The second area we collected data from was Walnut Grove. This area of campus is located south of Floyd Stadium between Peck Hall and the Cope Administration Building. The approximate dimensions of this area are 615 feet by 477 feet. The area contained thirty-five 55-gallon drums lined with trash bags for waste disposal. The area appeared to be more chaos than organization with vehicles parked haphazardly and every trash container overflowing with trash. The weather conditions during collection were identical to the Greenland site.

The Walnut Grove site is a moderately used area throughout the rest of the year. During the warmer months, with its location on campus and the shade provided from

the large trees, it is a relatively calm and quiet place for students to sit and study or have lunch. Ordinarily, there are three trash cans, six picnic tables, and three benches spread throughout the area, which were removed for the tailgating event. Walnut Grove is also used for other special events during the year, such as faculty or student organization picnics and gatherings.

With the Walnut Grove site being a conglomeration of people of different ages and backgrounds, we expected to find evidence of higher alcohol use and less food waste at this site compared with the Greenland site. We also believed we would see differences in brands of waste, which would show this site to be less affluent than the Greenland site. The amount of orderliness witnessed at the Greenland area and the complete lack thereof at Walnut Grove, appeared to validate our expectations.

### **ANALYSIS OF THE SAMPLE**

Once we had narrowed down our two site locations, the next task was to map out the area and determine where the samples of trash would be taken. Observations were begun at 4:00 p.m. on October 5, 2010. Each site was walked and trash locations were marked on a printed map of the area. After observing the areas, we decided which cans to collect from and how many samples we would need. At both sites a sample was collected from an outer perimeter trash can and one from the middle of the busiest area. The decision to collect only two samples from each site was based on sampling five percent of the total; and since the cans were so large, it was determined that two samples would more than cover the amount needed.

Collection was not begun until the start of the football game, which was 7:00 p.m., to avoid the large crowds and to ensure full samples. The collections were started at the Greenland site at 7:15 p.m. A wheelbarrow was used to carry the samples from the site to a waiting truck. While making the collections it was noted that the area was relatively deserted except for a few people watching the game on flat-screen televisions mounted to the side of their RV's. We removed the samples, placed them in the wheelbarrow, and put new trash bags into the cans. We then proceeded towards the truck used to haul the samples, which was parked in front of Peck Hall.

After unloading the Greenland samples, we began collecting samples from the sites within Walnut Grove. It was 7:55 p.m. by the time we had finished with the Greenland site and made our way to Walnut Grove. It was evident on arrival that the tailgating event was still going strong at Walnut Grove. Where Greenland had been relatively empty, Walnut Grove was a mass of confusion and drunkenness, with throngs of intoxicated people, loud music, and almost complete darkness. Every 55-gallon drum for trash collection was overflowing and surrounded by mounds of trash. Collections proceeded without much interruption, except for a young lady having a conversation with our wheelbarrow-offering confirmation of our observations of drunkenness amongst the occupants.

We began analyzing the contents of our samples on the morning of October 7, 2010, at 10:00 a.m., to allow a full day for sorting the material. A plastic tarp was spread out on the ground and the contents of the bags were poured out for separating. After separating by groups and brands, the numbers of each was counted. Notes were taken to record quantities, brands, container style, and in the case of liquids, fluid ounces. An attempt was made to weigh the food waste as well; however, the amount was so miniscule that our scales could not register it.

We began our analysis with the Greenland site collections and consequently made our first mistake. Instead of analyzing each bag independently, the contents of both samples were sorted as one unit. In hindsight, this defeated the purpose of collecting from different areas of the site. While similarities were observed between the two samples, those observations could not be attributed definitively to one area of the site. Although this realization came quickly, it was too late to change the method for the Greenland site. We separated the sample by brands and types of alcohol as shown in Table 1 below.

*Table 1. Alcohol contents of Greenland Drive site sample*

Qty	Container	Brand	Oz	Type	Total Oz
41	Can	Miller Lite	12	Beer	492
47	Can	Bud Light	12	Beer	564
21	Can	Coors Light	12	Beer	252
9	Can	Michelob Ultra	12	Beer	108
2	Can	Busch Light	12	Beer	24
5	Can	Natural Light	12	Beer	60
1	Can	Keystone Light	12	Beer	12
1	Can	Yuengling	12	Beer	12
10	Glass Bottle	Miller Lite	12	Beer	120
6	Glass Bottle	Bud Light	12	Beer	72
3	Glass Bottle	Shiner (Holiday Cheer)	12	Beer	36
3	Glass Bottle	Abita (Restoration)	12	Beer	36
1	Glass Bottle	Killian's (Irish Red)	12	Beer	12
3	Glass Bottle	Sol	12	Beer	36
1	Glass Bottle	St. Pauli Girl	12	Beer	12
1	Glass Bottle	Land Shark	12	Beer	12
1	Glass Bottle	Spaten (Oktober Fest)	12	Beer	12
1	Glass Bottle	Paulaner (Oktober Fest)	12	Beer	12
1	Glass Bottle	Sweet Water (Motorboat)	12	Beer	12
1	Glass Bottle	Victory Lager	12	Beer	12
1	Glass Bottle	Mothership Wit	12	Beer	12
1	Glass Bottle	Blue Moon	12	Beer	12
1	Glass Bottle	Mike's Mango Punch	12	Beer	12
1	Glass Bottle	Mike's Mohito	12	Beer	12



For example, there was a pile for cans of Bud Light and a pile for cans of Keystone Light. The alcohol packaging was also separated by container type such as can or bottle. After separating, a list was made of quantities, the type of container, brands, and liquid ounces.

After finishing with the Greenland Drive site, the Walnut Grove samples were examined. Correcting the previous mistake, the samples were analyzed separately. We used the same methods of recording the contents of each bag as was used for the Greenland site. Table 2 displays the alcoholic contents from the Walnut Grove sample.

*Table 2. Alcohol Contents of Walnut Grove Site Samples*

Bag	Qty	Container	Brand	Oz.	Type	Total Oz
1	1	Can	Budweiser	12	Beer	12
1	1	Can	Steel Reserve	12	Beer	12
1	4	Can	Yuengling	12	Beer	48
1	6	Can	Michelob Ultra	12	Beer	72
1	6	Can	Coors Light	12	Beer	72
1	6	Can	Pabst Blue Ribbon	12	Beer	72
1	26	Can	Natural Light	12	Beer	312
1	45	Can	Keystone Light	12	Beer	540
1	12	Can	Miller Light	12	Beer	144
1	8	Can	Miller Genuine Draft	12	Beer	96
1	20	Can	Bud Light	12	Beer	240
1	8	Glass Bottle	Bud Light	12	Beer	96
1	4	Glass Bottle	Coors Light	12	Beer	48
1	4	Glass Bottle	Bud Light (Lime)	12	Beer	48
1	3	Glass Bottle	Miller Light	12	Beer	36
1	2	Glass Bottle	Blue Moon	12	Beer	24
1	1	Glass Bottle	Miller High Life	12	Beer	12
1	1	Glass Bottle	Hornsby's Hard Cider	12	Beer	12
1	1	Glass Bottle	Jim Beam (Bourbon)	25.36	Whiskey	25.36
1	1	Glass Bottle	Wild Turkey (Bourbon)	12.68	Whiskey	12.68
1	2	Glass Bottle	Cookes (Brut)	25.36	Champagne	50.72
2	9	Can	Natural Light	12	Beer	108
2	16	Can	Bud Light	12	Beer	192
2	3	Can	Keystone Light	12	Beer	36
2	2	Can	Miller Light	12	Beer	24
2	2	Can	Stroh's	12	Beer	24
2	2	Glass Bottle	Michelob Ultra	12	Beer	24
2	4	Glass Bottle	Scrimshaw	12	Beer	48
2	1	Glass Bottle	Seagram's Escapes	12	Wine Cooler	12
2	1	Plastic Bottle	Evan Williams	12.68	Whiskey	12.68
2	1	Glass Bottle	Burnett's (Fruit Punch)	25.36	Vodka	25.36

As we began inspecting the second bag from the site, a smaller sealed bag of garbage with completely different contents than everything in the remainder of the larger bag was discovered. The contents of the first bag matched the contents of the second bag perfectly except for what was in the small bag. The small bag was almost exclusively food related waste, food packaging, and disposable dinnerware. The only similarities between the small bag and the two larger bags were an abundance of plastic cups, which were possibly used for alcohol consumption. The contents of the small bag indicate it was brought from an area within Walnut Grove that was hosting an alumni or faculty event.

Since the study investigated differing amounts of alcohol use and evidence of higher affluence of one site over the other, a decision was made to focus more on the alcohol evidence than the other types of information found within the sample. Even if we had not intended to look at alcohol, the sheer amounts of alcohol evidence clearly pointed in this direction. Figures 4 and 5 below show the stark contrast between food and alcohol waste from the two sites.

*Figure 4. Greenland Drive Sample*



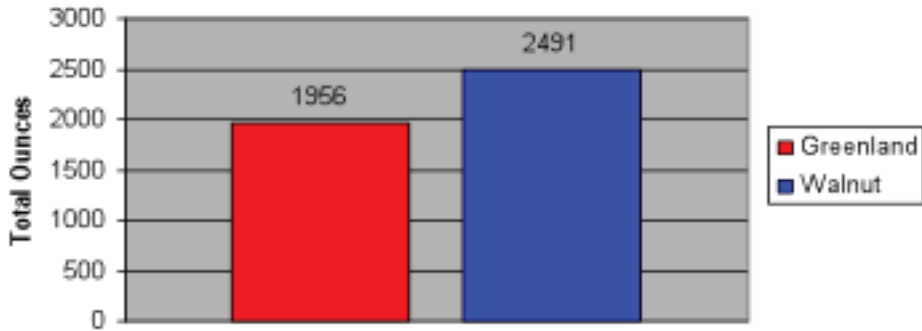
*Figure 5. Walnut Grove sample*



In each of these photos the small bag in the center represents the total food waste in our samples from each site and the surrounding bags are all alcohol containers.

The data showed heavy alcohol use at both sites; however, the Walnut Grove site far exceeded the amounts found at Greenland Drive as shown in Figure 6.

Figure 6. Total alcohol consumption in each sites samples



This graph clearly shows the discrepancy between the two sites. There was no evidence of liquor use at the Greenland site, which was not surprising considering the more familial atmosphere of the site; however, the Walnut Grove site did contain liquor and those numbers are included in the total alcohol consumption.

Since the total number of waste containers at each site and the number of alcohol related waste products were known, estimates of the total amount of alcohol consumption at each site were made, as shown in Figure 7.

Figure 7. Estimated total alcohol consumption at each site

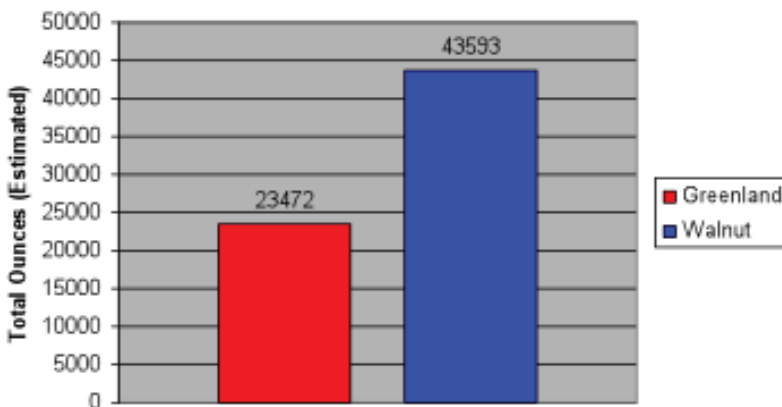


Figure 7 demonstrates that Walnut Grove had substantially higher estimated alcohol consumption than Greenland Drive. The alcohol consumption at Walnut Grove is estimated to be 43,593 ounces or the equivalent of 3,633 beers, which is nearly twice as much as the

estimate for Greenland Drive (23,472 ounces or 1,956 beers). These estimates were created by calculating the mean ounces of alcohol per trash container and multiplying by the total number of containers at each site. If the mean at Walnut Grove had been calculated without using the skewed sample (bag #2), the total estimated alcohol consumption would have been 69,475 ounces or the equivalent of 5,790 beers.

In searching for evidence of differences in the level of affluence between the two sites, the price per ounce of the alcohol consumed and the different brands at each site were analyzed. There were some distinct differences between the brands of alcohol being used at both sites. At Walnut Grove high quantities of inexpensive beer were recorded, such as Keystone Light (24 percent), and only a few moderately priced domestic and import brands as seen in Table 3 below.

*Table 3. Walnut Grove alcohol costs*

Bag #	Qty.	Cont.	Brand	Type	Total Ozs.	Cost Per Oz.	Total Cost
1	1	Can	Budweiser	Beer	12	0.08	0.96
1	1	Can	Steel Reserve	Beer	12	0.05	0.60
1	4	Can	Yuengling	Beer	48	0.08	3.84
1	6	Can	Michelob Ultra	Beer	72	0.08	5.76
1	6	Can	Coors Light	Beer	72	0.08	5.76
1	6	Can	Pabst Blue Ribbon	Beer	72	0.06	4.32
1	26	Can	Natural Light	Beer	312	0.06	18.72
1	45	Can	Keystone Light	Beer	540	0.06	32.40
1	12	Can	Miller Light	Beer	144	0.08	11.52
1	8	Can	Miller Genuine Draft	Beer	96	0.07	6.72
1	20	Can	Bud Light	Beer	240	0.08	19.20
1	8	Bottle	Bud Light	Beer	96	0.09	8.64
1	4	Bottle	Coors Light	Beer	48	0.09	4.32
1	4	Bottle	Bud Light (Lime)	Beer	48	0.10	4.80
1	3	Bottle	Miller Light	Beer	36	0.09	3.24
1	2	Bottle	Blue Moon	Beer	24	0.12	2.88
1	1	Bottle	Miller High Life	Beer	12	0.07	0.84
1	1	Bottle	Hornsby's Hard Cider	Beer	12	0.12	1.44
1	1	Bottle	Jim Beam (Bourbon)	Whiskey	25.36	0.79	20.03
1	1	Bottle	Wild Turkey (Bourbon)	Whiskey	12.68	1.10	13.95
1	2	Bottle	Cookes (Brut)	Champagne	50.72	0.28	14.20
2	9	Can	Natural Light	Beer	108	0.06	6.48
2	16	Can	Bud Light	Beer	192	0.08	15.36

*Continued*

Bag #	Qty.	Cont.	Brand	Type	Total Ozs.	Cost Per Oz.	Total Cost
2	3	Can	Keystone Light	Beer	36	0.06	2.16
2	2	Can	Miller Light	Beer	24	0.08	1.92
2	2	Can	Stroh's	Beer	24	0.06	1.44
2	2	Bottle	Michelob Ultra	Beer	24	0.09	2.16
2	4	Bottle	Scrimshaw	Beer	48	0.15	7.20
2	1	Bottle	Seagram's Escapes	Wine Cooler	12	0.10	1.20
2	1	Bottle	Evan Williams	Whiskey	12.68	1.10	13.95
2	1	Bottle	Burnett's (Fruit Punch)	Vodka	25.36	0.39	9.89
<b>Total</b>						<b>\$245.90</b>	

In the Greenland sample these numbers reversed. There were high quantities of moderately priced domestic brands, such as Miller Light (31 percent) and Bud Light (33 percent), as well as a large assortment of imported and domestic specialty beers as seen in Table 4 below.

*Table 4. Greenland Drive alcohol costs*

Qty.	Container	Brand	Type	Total Ozs.	Cost Per Oz.	Total Cost
41	Can	Miller Lite	Beer	492	0.08	\$39.36
47	Can	Bud Light	Beer	564	0.08	\$45.12
21	Can	Coors Light	Beer	252	0.08	\$20.16
9	Can	Michelob Ultra	Beer	108	0.08	\$8.64
2	Can	Busch Light	Beer	24	0.06	\$1.44
5	Can	Natural Light	Beer	60	0.06	\$3.60
1	Can	Keystone Light	Beer	12	0.06	\$0.72
1	Can	Yuengling	Beer	12	0.08	\$0.96
10	Bottle	Miller Lite	Beer	120	0.09	\$10.80
6	Bottle	Bud Light	Beer	72	0.09	\$6.48
3	Bottle	Shiner (Holiday Cheer)	Beer	36	0.12	\$4.32
3	Bottle	Abita (Restoration)	Beer	36	0.12	\$4.32
1	Bottle	Killian's (Irish Red)	Beer	12	0.11	\$1.32
3	Bottle	Sol	Beer	36	0.12	\$4.32
1	Bottle	St. Pauli Girl	Beer	12	0.12	\$1.44
1	Bottle	Land Shark	Beer	12	0.12	\$1.44
1	Bottle	Spaten (Oktober Fest)	Beer	12	0.13	\$1.56
1	Bottle	Paulaner (Oktober Fest)	Beer	12	0.15	\$1.80

Qty.	Container	Brand	Type	Total Ozs.	Cost Per Oz.	Total Cost
1	Bottle	Sweet Water (Motorboat)	Beer	12	0.12	\$1.44
1	Bottle	Victory Lager	Beer	12	0.15	\$1.80
1	Bottle	Mothership Wit	Beer	12	0.12	\$1.44
1	Bottle	Blue Moon	Beer	12	0.12	\$1.44
1	Bottle	Mike's Mango Punch	Beer	12	0.12	\$1.44
1	Bottle	Mike's Mohito	Beer	12	0.16	\$1.92
<b>Total</b>						<b>\$167.28</b>

The signs of affluence were beginning to show with the more discerning tastes in beer at the Greenland site, but to discover if this was really the case the costs involved were examined. We visited several retail locations and recorded the price of each brand.<sup>1</sup> The total cost at Walnut Grove was higher, but this is a reflection of the larger quantities at the site. To obtain a better sense of how much was being spent on beer at the two sites; we calculated the average cost per ounce and the two sites were compared. At Walnut Grove there was also evidence of liquor in the samples, but none at Greenland Drive, therefore liquor was taken away from the average cost since it was considered an outlier in the total sample. At Walnut Grove the cost per ounce of beer was \$0.07 and at Greenland Drive the cost was \$0.09. While this does not appear to be a large discrepancy, it is actually a difference of 22 percent. These numbers confirm the study's original hypothesis concerning greater affluence at the Greenland Drive site.

### INTERPRETATION OF THE SAMPLE

A number of inferences can be made from our data and observations. From a garbological perspective, the people occupying both the Greenland Drive site and the Walnut Grove site must have done so only temporarily; otherwise they could not have been a functional society with the amounts of alcohol use that was observed and recorded. Both sites were used as a place of gathering, drinking, eating, and communing. In the case of the Walnut Grove site, the main focus of the occupants appeared to be the consumption of alcohol. Although the consumption of alcohol was a priority of the occupants at the Greenland Drive site, it was to a lesser extent. At the Greenland Drive site, the alcohol consumed appeared to be of a more expensive nature than that of the Walnut Grove site, indicating that the people of the former are of a higher socioeconomic group than the latter. While both of these sites seldom see large gatherings of people, this day was different. The college and its administrators invited people to these sites on this day to celebrate before a football game, and the people came. At the Walnut Grove site they came in droves

<sup>1</sup> Prices were obtained at: Exxon, 1118 Mercury Blvd., Murfreesboro, TN 37130; University Center Market, 1156 East Main St., Murfreesboro, TN 37130; Beer Depot, 2002 East Main St., Murfreesboro, TN 37130; Premium Wine & Spirits, 225 N. Rutherford Blvd. # H, Murfreesboro, TN 37130; C N G Wine & Spirits, 2750 S. Rutherford Blvd., Murfreesboro, TN 37130.

of similarly aged people, likely college students. Many of the people who arrived at the Greenland Drive site did so with their families, some in large recreation vehicles. After the football game ended, the people packed up their belongings, less their trash, and abandoned the sites.

The ritualistic celebration of football is what ties these two sites together. Both of these sites were temporary and the occupants were there, at least on some level, to celebrate the football game later in the evening. This pre-game ritual usually includes the drinking of alcohol and the consumption of food. The celebrations at the Walnut Grove and Greenland Drive sites do not stray from this typical conception of the ritual; however, there are a number of key differences in the people inhabiting the respective sites.

Although the people occupying the Walnut Grove site were there to celebrate football, it is not difficult for one to imagine that prior to the game they were consumed by alcohol. Excessive inebriation was observed, and this was reflected in the data. Young-adults of varying ages, as they often do, came together with their friends and peers to take advantage of this opportunity to be intoxicated in public. The amount of alcohol the data suggest they consumed indicates that the word “moderation” seems to be, for many of these people, absent from their vocabulary on this occasion. These people were taking advantage of the opportunity to let go of inhibitions and be foolish and careless. One may even be able to ascertain that the celebration at the Walnut Grove site was a celebration of consumption, or a celebration of alcohol, rather than one primarily of football.

The occupation of the Greenland Drive site stands in stark contrast to that of the Walnut Grove site. Although the exact number of people at either site is not known, observations suggest that there were fewer people at this site. These people gathered together not simply with their friends and peers, but also with their families. Some gathered around televisions watching the pre-game analysis of commentators while others played football with their children. They gathered not to let go of inhibitions or fully embrace the effects of alcohol, but to relax, to contemplate the football to come, and to enjoy the company of their friends and family. These people seemed to enjoy a certain calmness that was absent at the Walnut Grove site. While they did consume alcohol, the amounts they consumed indicate that at least some of them were doing so in moderation.

The second difference between these two groups of people in this study regards social complexity. The fact that the Walnut Grove site occupants consumed primarily inexpensive alcoholic beverages indicates that these people were possibly of a lower socioeconomic class. This conclusion concerning class supports the conventional picture of the “broke” college student. On the other hand, the occupants of the Greenland Drive site not only consumed more expensive alcoholic beverages, but also brought with them large recreation vehicles, televisions, and satellite dishes. We believe that these indicators of personal and familial accumulations of wealth signal that these people are of a higher socioeconomic class than their Walnut Grove counterparts. These are people who likely play a specialized role in the society and have done so with moderate to substantial success. It was also noted



that there were several law enforcement personnel roaming the area of Greenland Drive, whereas none were observed at Walnut Grove, where they were probably needed most.

Despite the fact that alcohol consumption was obvious and significant at the student occupied site, it is prohibited. The Tennessee Board of Regents, the governing board for Middle Tennessee State University, prohibits the consumption of alcohol by students on its campuses. "The use and/or possession of alcoholic beverages on university, community college, and technology center owned or controlled property shall be prohibited except as provided by Policy 1:07:00:00" (Tennessee Board of Regents). The exceptions policy mentioned allows for the President of an institution to make exceptions for foundations and alumni, but specifically prohibits alcohol consumption in "classrooms, labs, faculty or administrative offices, residence halls, student dining halls, *student gathering areas, outdoor public areas*, or athletic facilities accessible to the public" and in both policies students are expressly forbidden to consume alcohol on campus (Tennessee Board of Regents, emphasis added). The noted absence of law enforcement personnel in or near Walnut Grove suggests that the policies mentioned above were ignored for this occasion, possibly as a means to bolster support for the MTSU football program.

## CONCLUSIONS AND RECOMMENDATIONS

From our data and observation we conclude that on this particular occasion people came together to eat, drink, and commune in a temporary manner; these sites were occupied in this capacity because of a football game and ceased to be so after the game concluded. It is clear that the consumption of alcohol was a primary focus of the gathering at the Walnut Grove site. Also, observations suggest the people who occupied the Walnut Grove site were of lower socioeconomic class than those at the Greenland Drive site, since they had fewer amenities and less expensive beverages. Occupants of the Greenland Drive site did so to gather with their families and friends, with alcohol consumption being a secondary function of the celebration. Because of the apparent suspension or ignoring of law in regards to alcohol on the premises, it is clear that this aspect of the ritualistic celebration of football is an important one in the eyes of MTSU's administrative officials.

The amount of alcohol consumed, as indicated by the data and observations, is staggering. While it was hypothesized prior to the study that alcohol consumption would be central to this occasion, early expectations were that it would be more veiled. Instead observations showed, especially in the case of the Walnut Grove site, that attempts to veil consumption of alcohol were minimal, while the consumption inferred from our data was immense. Clearly, the findings of this research indicate a potential need to re-evaluate the wisdom of sponsoring such events on a college campus.

Observations at Walnut Grove were of large crowds of college age students having in essence, a large outdoor party. Given that the typical student begins his or her college career at the age of eighteen, it would be reasonable to assume that many of the students were under the legal drinking age. Why is it that they would not be able to purchase alcohol at a convenience store across the street, yet they could drink freely here with no objections?



To add to the irony, an email was received one week after observations were conducted reminding students that October 17-23 marked the observance of National Collegiate Alcohol Awareness Week at institutions across the country. Is this a case of “see no evil, hear no evil,” or of the left hand not knowing what the right is doing? In the end, even if it is legal to have alcohol at these events, the question remains; is it the morally responsible thing for the university to do?

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# Chronic Illness and Mental Health Underutilization in African-Americans: A Labeling Theory Perspective

*Matthew Bennett*

## **Abstract**

*This paper explores the under-utilization of mental health services amongst African-Americans, with particular emphasis on labeling theory in defining the structural origins for perceived barriers to treatment. In the United States, with its tragic legacy of racially-based oppression, race is generally understood to have powerful connotations for social norms and individual self-concept, and in the case of discriminated minorities such as African-Americans, to have broad negative effects on quality of life. With health outcomes for African-Americans already poorer than their white counterparts, reducing barriers to all forms of treatment is essential to achieving a greater level of health parity. This is especially relevant for mental health services, as comorbid mental distress can serve to confound the treatment of physical ailments, most notably those that require long term care or lifestyle modification, where personal agency has its most significant impact. Indeed, mental health, more than any other component of overall health, can act as a gateway to a broader range of positive life choices, thereby facilitating improved health lifestyles. We will begin with an overview of the disparities between the races in terms of utilization and outcomes, including rates of inpatient care. We will then examine the perceived barriers to mental health treatment experienced by African-Americans, noting the stigma of seeking treatment, and the role of social integration in recovery and using labeling theory as a framework. Next, we will examine the consequences of these perceived barriers: how lack of mental health treatment creates negative health outcomes in the African-American population and contributes to disparity in survivability and mortality rates. Finally, some suggestions for improving utilization equity are advanced, based in successful programs from other fields and relevant research on attitudes towards accessing care.*

Attempts at improving social justice in the United States have been hindered by the legacy of racially-based oppression and its prolonged effects on African-Americans. Despite the elimination of most legal forms of discrimination, African-Americans still live in a society where many forms of discrimination still exist, the results of which have both personal and systemic consequences. Amongst all ethnic groups in the United States, African-Americans have the highest level of housing segregation, a fact which is in part due to social perceptions but also related to high numbers of African-Americans living in public housing (Urban Institute 2009). In fact, race is highly correlated with socioeconomic status (SES)—research shows that African-Americans are nearly three times more likely to live below the poverty line than non-white Hispanics (Urban Institute 2010). This means that even amongst consistently-disadvantaged minority groups, African-Americans are uniquely vulnerable and further disenfranchised than other minorities.

The effects of discrimination are also evident when examining health outcomes. Statistically, African-Americans suffer a higher incidence of chronic illness than do their white counterparts. They also, on average, experience shorter life spans and poorer outcomes from treatment for chronic illness (Hayward, et al 2000). African-Americans are equally disadvantaged in regards to mental or behavioral health. They tend to underutilize mental health services compared to their white counterparts, even controlling for SES and other conditions of access, like insurance coverage for services (Thurston & Phares 2008). This is doubly significant in the case of individuals who are also suffering from chronic physical ailments, as a lack of treatment for mental disorder is associated with poorer outcomes in the treatment of physical illness (Katon, Lin, & Kroenke 2007). This is in addition to overall poorer outcomes that result from long-term stress, like that associated with poverty and racial inequality (Thoits 2010). This paper explores the underutilization of mental health services among African-Americans with particular emphasis on labeling theory in defining the structural origins of perceived barriers to treatment.

## **LABELING THEORY – AN INTRODUCTION**

### ***Stigmatization and Deviance***

Labeling theory is predicated on the idea that society sets collective “norms,” or definitions, for acceptable attributes. According to Goffman in his book *Stigma: Notes on the management of spoiled identity* (1965), those attributes can be behavioral—such as a manner of dress or speaking—but can also be physical attributes related to appearance or ability. Behaviors or attributes that fall outside the normalized range are termed deviant and as such are stigmatized or labeled by society as less desirable. Attaching this stigma to individuals serves to discredit them and tends to identify them as separate from normalized society.

The result, then, is that all labels can drastically alter not only an individual’s interaction with society but also their own self concept. In the case of known stigma, or stigma applied openly to the individual, this can serve to create feelings of inferiority and ostracism,

reducing the ability to successfully interact with the remainder of society, especially for attributes that are beyond the individual's control. This offers a theoretical explanation for the self-imposed segregation of stigmatized groups—in this case, African-Americans who, as we have mentioned, are significantly more likely to live in homogeneous communities. Goffman, again in *Stigma*, explains this behavior as designed to create a safe “in-group” for deviants—that is, a place where individuals can interact without experiencing the mitigating effects of negative stigma (Goffman p.112-113).

Edwin Lemert classifies all of these behaviors, which form as a response to the effect of a stigmatized attribute, as secondary deviance. In Lemert's theory, the initial behavior or attribute that causes stigmatization is primary deviance. Those behaviors that follow, and are informed or otherwise affected by the individual's altered interaction with normalized society, then fall under this category of secondary deviance (Lemert 1951). These secondary behaviors can often be more damaging than the original deviant label, not only making it impossible to regain “normal” status (if that were possible for the individual in the first place) and promoting additional deviant behavior by altering the deviant individuals' interaction with society and its members. Once the stigmatized individuals cannot utilize normal interactions to function in society, then deviant behavior, driven by the original discrediting stigma, becomes the only available route.

### ***Labeling theory and race***

When this idea of normalcy and deviance serves to stigmatize an entire group based on a particular attribute, such as skin color, what results is the dominance of one racial group over another. Over long periods of time, the oppressive effect of this stigma psychologically damages minority individuals until they gradually acquiesce to the idea of their own inferiority (Memmi 1965). Barry Adam in *The Survival of Domination* (1978), which expands on Memmi's work, theorizes that this continued and long-term internalization of society's disapproval or outright condemnation eventually causes an internal justification for self-destructive or self-limiting life choices. This loosely corresponds with the psychological phenomenon of learned helplessness, a state where individuals feel powerless to change their own situation. And like Adam's theory, learned helplessness is also attributed to a long term barrage of negative interactions. This experience of oppression described by Memmi and Adam, however, goes beyond this condition to the act of actually choosing behavior that compounds societal limitations.

### ***Labeling and mental illness***

The concept of social stigma is also significant to the discussion of underutilization of mental health services. The mental illness label carries its own substantial stigma, and inferentially, can be a source of primary deviance for the individual. In fact, Thomas Scheff in *Being Mentally Ill* (1966) argued that mental illness is completely a manifestation of the influence of society—that is, mental illness is in itself a label applied to certain deviant actions. Indeed, the increasing medicalization of many behaviors that were previously

considered personality traits – high functioning autism, for example – supports this idea. The definition of what constitutes mental illness is shaped and altered by the influence of society, as well as the corresponding labels. Applying then Memmi's idea of oppression to this model, mental illness—behaviorally speaking—becomes a self-fulfilling prophecy in which diagnosed individuals unconsciously alter their behavior to match their diagnosis. This is likely an oversimplification, but it is significant in describing the compounding effect of social stigma on mental illness and its inherently deviant behavior. In fact, according to Link's (1989) modified label theory, because of the prevalence of negative labels such as unpredictability, helplessness, and instability that are ascribed to mentally-ill individuals, those who take on a label of mental illness often become socially rejected and emotionally withdrawn.

### **ANALYSIS OF PERCEIVED BARRIERS**

Unfortunately, doctors in the United States are still overwhelmingly Caucasian. Despite the many advances that African-Americans have made, less than 5% of doctors in the US self-identify as African-American (Rao & Flores 2007). Subsequently, race-related stigma becomes a factor in interactions between African-Americans and the medical profession. Horrific events such as the Tuskegee syphilis study have served to reinforce a perception among African-Americans that the medical establishment at best underserves them and at worst openly exploits them for its own benefit (Witt 2006). In fact, in at least one study, African-Americans who were undergoing treatment for mental illness felt that their psychiatrists were “experimenting” on them. This description was a response to doctors' changing of their medication, which is a common practice as many drugs within a specific class (i.e. SSRIs like Prozac, Effexor, etc.) are very patient-specific in terms of effectiveness. It can take months if not years of trial and error to determine the most effective drug for an individual. In contrast, most Euro-Americans from the same study felt that the changed prescriptions were an important part of managing their conditions, and reflected the skill of their clinician (Carpenter-Song 2010).

Statistically, the racial disparities in health outcomes exist even when SES is controlled for, which indicates that racial discrimination is frequently more than merely perceived, and not merely a function of class and its strong correlation with race (Smedley, Stith & Nelson 2010). As was discussed earlier, these negative outcomes extend into the arena of mental health services as well, where if anything they are exacerbated—both by the stigmas applied to the mentally ill, which are certainly recognized by African-Americans—but also by the historical lack of cultural sensitivity among mental health service providers.

Research suggests that this lack of cultural relevance is a key factor in African-Americans' decisions not to utilize mental health treatment (Obasi & Leong 2009). Additionally, because of underfunding in publicly supported community mental health centers, many African-Americans' only experience with mental health professionals has come from the criminal justice system. These experiences are also typically negative. Not only is it well-known that African-Americans are overrepresented in U.S. prisons, but research shows

that race plays a factor in successful insanity pleas with African-Americans less likely to have an insanity plea successfully accepted by the court when compared to their white counterparts (Thompson 2010). This research suggests that African-Americans are less able to gain the mentally-ill label when it carries less deviant, or positive connotations. This in turn reinforces the idea among African-Americans, especially in vulnerable communities, that mental health professionals cannot impact their lives in a positive way.

These negative experiences with the structure of health care do little to overcome fears of stigmatization among African-Americans. According to research, African-Americans cite a fear of being labeled as unstable or crazy as reasons for not accessing mental health services (Conner, et al 2010 Witt 2006). Many African-American patients go out of their way to prevent all but a few of their closest relations from knowing that they receive treatment; being identified as lazy, even by one's own self, is a commonly mentioned label (Carpenter-Song et al. 2010). This suggests at the very least, a perception amongst African-Americans of negative stereotypes being applied to them. Link's modified label theory is especially relevant here as attitudes toward the mentally ill amongst African-Americans are statistically more negative than within society as a whole (Conner, et al 2010). This means for the individual contemplating mental health treatment, there is increased risk of an even greater negative outcome from mental illness stigmatization within the community. Returning to Goffman's concept of safe areas of deviance, African-Americans are further disadvantaged, because in gaining the stigmatized label of mentally ill, they risk losing their acceptance in the African-American community, which may represent the only place within broader society where they do not feel discrimination. Thus, on one side, we have the medical establishment—historically abusive of African-Americans, representative of broader societal discrimination, and culturally insensitive to the African-American community. On the other side, we have the African-American prospective patient, coping first with the burdens of racism and chronic illness, and doing so while simultaneously experiencing the symptoms of mental or emotional distress. In this context, it is easy to see why few African-Americans will risk adding another negative label—one that may jeopardize their interaction with the community—to access services that have traditionally done very little to make themselves useful or relevant to minority groups.

## **IMPLEMENTING IMPROVED ACCESS**

Not surprisingly, underserved communities are typically resistant to change initiated from within the healthcare establishment, which minorities perceive as contributing to their disenfranchisement. In order to address the issue, a broader approach is required that addresses the community as a whole, rather than focusing on individual life choices. Each one of these strategies that follow will not only increase the number of people who are seeking treatment, but they will also improve community awareness and attitudes towards mental health treatment.

1. Mental health service providers who work in minority communities need cultural-awareness training. A consistent complaint among African-Americans

has been a lack of cultural sensitivity among healthcare providers. Addressing this provides a foundation of trust from which education and outreach can be established. To that end, treatment must begin with psychosocial intervention and not drug therapy. Research shows that a high percentage of African-Americans already perceive the prescribing of medication by the clinician as a substitute for effort or interest in their patients (Carpenter-Song 2010). While drug therapy is an important part of mental health for many, African-Americans who only feel further marginalized by the prescription are unlikely to take the medicine or continue treatment at all, especially in what we have already identified as an environment hostile to their situation, and unlikely to drastically change very quickly.

2. Community programs that educate individuals about common psychological symptoms and outreach to sufferers and their families must be established. A recent study of community attitudes towards police has shown that individual attitudes are amplified within the community setting, both negative and positive. In the study, attitudes were substantially improved when police began to assert a positive, honest, and community-centered presence (Dai 2009). Once police engaged the community and began to create positive experiences, this effect of community compounded their efforts, and attitudes were widely improved, regardless (to some extent) of actual individual involvement in the new programs. This offers an excellent model for mental health services to follow, by establishing community programs that educate individuals about common psychological symptoms, and the warning signs of more serious distress. This will give counselors an opportunity to build credibility, and also to explain common treatment options. Having an accurate picture of the processes involved in mental health, free of media hyperbole and cultural stereotyping, will serve to further reduce associated stigma. Furthermore, individuals struggling with their own illness, or the illness of a family member may find solidarity with other sufferers, in an environment where they feel free to discuss their problems without fear of stigmatization or other reprisal. All of these things have the potential to begin making positive impressions, which in turn can have beneficial repercussions throughout the community as a whole.

3. Considering the high number of chronic illness sufferers who have comorbid psychological symptoms, ongoing counseling should be recommended as part of a comprehensive treatment plan for chronic illness sufferers. Implementing this in the public track (Medicare/Medicaid) will literally set a new standard in care, and pressure private insurers also to include counseling as an integral part of long term care. Considering that over 75 percent of US healthcare costs are associated with the treatment of chronic illness, methods for improving the efficiency of that care can have a dramatic impact on total healthcare costs nationwide (Anderson 2004). Implementing mental health programs for chronic illness sufferers would allow



relatively inexpensive community mental health programs to replace extremely expensive hospital stays and emergency room visits, by encouraging responsible management of chronic conditions, adherence to medication schedules and regular doctor visits. Put simply, when individuals are not suffering unmanaged anxiety, depression or other affective disorder, they will take better care of themselves in general, which saves money by reducing emergency and acute treatment of chronic conditions.

## **CONCLUSION**

While stigma about mental illness exists across our culture regardless of race (Link, Yang, Phelan & Collins 2004), there are particular barriers to access—real or perceived—that are unique to African-Americans themselves. The ramifications of this disparity extend more broadly to society as a whole. Beyond the obvious ethical impetus for improving service to African-Americans, there is also a tangible benefit for society. Research shows increased health care expenses for chronic care of patients with untreated mental distress (Shen, Sambamoorthi & Rust 2008). That is doubly significant for a society that is not only straining under the costs of health care but one in which African-Americans are overrepresented in the publicly-funded health care delivery system. More generally, individuals with access to mental health treatment are better able to manage not only their emotional symptoms but also their physical symptoms as well. From a purely functionalist standpoint, by improving the outcomes for African-American citizens, we increase their working life spans and overall productivity in relation to society. More importantly for the US as a moral society, barriers to appropriate treatment for any individuals deprives those individuals of a basic human right and weakens our society as a whole. Without addressing the broader sociological components of underutilization, improved parity in mental health, and access to mental health care, cannot progress.

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# **We Are What We Eat: A Cultural Examination of Immigrant Health and Nutrition in Middle Tennessee**

*Sarah Visocky*

## **Abstract**

*The purpose of this research is to examine recent Hispanic immigrants to Middle Tennessee from an anthropological perspective to discover possible correlations to answer the research questions: how are Latino and Hispanic immigrant populations' nutritional statuses affected by acculturation to the United States and to Middle Tennessee, and what factors come to play in changing their own food practices? Results include information gleaned from previous ethnographic research as well as from interviews with local Hispanic immigrants relating to food insecurity, the impact of school lunches on immigrant children's health, and possible remedies to halt the declining health of immigrants to the Middle Tennessee. This research suggests that the immigrant experience is not the same for every group or even for each individual, that health outcomes of other immigrants differ according to their experiences of acculturation.*

## INTRODUCTION

Demographic information on Tennessee has been and is still being computed in terms of the black and white population; however, the actual demographics of the state are much more complex. Tennessee has the sixth highest rate of increase of immigration growth in the United States, and it is estimated the immigrant population and immigrant births are adding nearly 210,635 persons to Tennessee every year equating to 24.6% of the state's overall population increase. Tennessee must accordingly address its new diversities.

Middle Tennessee, specifically Murfreesboro, reported in the 2000 Census a foreign-born population of 4.9% of the total population of the city. Residents of Hispanic or Latino/a origin accounted for roughly 3.5% of the city's total population, thus making this group the third largest, behind the city's white and black populations. This statistic shows the metamorphosis of diversifying ethnic populations and mirrors the changes apparent across the nation of the evolving demographics. This transformation requires a critical re-examination of the issues of most significance to the state.

While Tennessee's population is becoming more diverse, its population is also becoming alarmingly unhealthy. According to recent statistics Tennessee consistently ranks among the worst states in self-reported health status (46<sup>th</sup>), lack of regular physical activity (49<sup>th</sup>), percent overweight or obese (47<sup>th</sup>), and rate of diabetes (50<sup>th</sup>). This research project aims to examine the population from the angle of both an increasingly diverse population as well as the disturbing trends in health, and will be applying an anthropological perspective to discover possible correlations. It posits that an anthropological approach that focuses on the details of people's lived experiences will improve our understanding of how health issues arise, and how people deal with these issues.

In-depth studies of food systems highlight the pervasive role of nutrition in human life. By focusing on a specific ethnic minority, the researcher begins to understand the factors that relate food consumption patterns with other parts of social life, that when combined present an overall image of the reasons for the changing bodies of Hispanic-Latino immigrants in the United States. This research will first examine the study of food in anthropology. It will move on to previous research on health and immigrants, and finally will analyze the specific data collected during a recent, in-depth field project conducted by anthropologists Dr. Ida Fadzillah and Dr. William Leggett in 2009-2010 with the Hispanic immigrant families in Murfreesboro focusing on the health habits of these families. This research poses the following research questions: how are Latino and Hispanic immigrant populations' nutritional statuses affected by acculturation to the United States and to Middle Tennessee, and what factors come to play in changing their own food practices? The conclusions will focus on three elements: food insecurity, school lunches, and possible remedies to the declining health of immigrants to the US and to Tennessee in particular.

## HEALTH AND NUTRITION IN THE UNITED STATES

The study of health and nutrition by anthropologists is not a new or unusual focus; for decades many anthropologists along with other social scientists have made the study of food culture and health and nutrition a top concern in their research (see, for example Anderson 2005; Gabaccia 1998; Kumanyika 2008; Long-Solís & Vargas 2005). The ethnographic method, which focuses on in-depth interviews, participant-observation, focus groups, and quantitative surveys over an extended period of time, helps to assess how multicultural communities view health and well-being in relation to the food consumption habits they practice (see Galvan 2009; Gold 2009; Kershen 2002; Minoura 1992). The ethnographic approach is thus useful in providing the complex details of a situation that statistical studies often lack.

While anthropologists have long studied health and nutrition among non-Western cultures, what is relatively new to the discipline is the involvement of anthropologists in exploring and studying the environments surrounding immigrants and refugees in the United States. Specifically, these new Americans' sense of community, educational settings, religious ideologies, economic statuses, food practices, et cetera have only recently been examined to determine their affect on immigrants' health since emigrating to the US. This focus had previously been utilized mainly by clinical nutritionists and epidemiologists (see Clark 1993; Minoura 1992; Montero-Sieburth & LaCelle-Peterson 1991; Story, Kaphingst, Robinson-O'Brien, & Glanz 2007).

Interestingly, very little previous research has been conducted on immigrant nutrition in the American South, and even less on the nutrition and health of immigrants in Tennessee. However, because the diversity of the Middle Tennessee population is growing at such a rapid pace, an examination of immigrant nutrition and health is important in order to provide a more positive, culturally sensitive policy on health and nutrition for people moving into the area.

In terms of the Latino and Hispanic immigrant population in the United States, using the ethnographic process can provide key insights into food consumption patterns in the daily lives of these individuals, which are not usually captured in a 24-hour food recall or food frequency questionnaire. Using life histories and other types of open-ended interviews with consultants can provide information about lifetime experience of individuals, which can lead to key information about food and chronic nutrition-related diseases of their culture. Even clearer for researchers is proof that combining qualitative and quantitative methods add to well-rounded explanations for food consumption patterns (see Himmelgreen 2002). Importantly, as immigrants move to the American South, particularly to Tennessee, dietary habits seem to be changing, making the immigrant population prone to higher rates of obesity and nutrition-related diseases (see Denkler 2009; Ferris 2005; Long-Salís 2007; Marte 2007; Pérez and Abarca 2007; Salazar 2007). Heart disease, cancer, stroke, chronic respiratory diseases, accidents, diabetes, Alzheimer's disease, influenza and pneumonia, nephritis, and septicemia are the ten leading causes of deaths in the United States, and most of these illnesses can be prevented or delayed with proper nutrition and physical

activity. Comparing minority groups in the United States, heart disease is less prevalent among the Hispanic population compared to African Americans and Caucasians, though this fact has already begun to change. Instead the growing epidemic within the Hispanic and Latino immigrant community is in elevated cases of diabetes and obesity, (Edelstein & Sharlin 2011) compounded as cases of Attention Deficit Disorder, asthma, and high blood pressure have begun to surface, signifying an important, life-threatening phenomenon among immigrants.

So what factors account for the ill-health associated with immigration to the United States? Acculturation and the transition of ethnic peoples to a Westernized dietary pattern of highly processed, high-fat foods has been linked to morbidity through inflammatory processes and oxidative stress, as well as an increase of cellular changes and chronic diseases of aging as they move away from traditional dietary patterns of fresh whole foods (Iso, Date, Noda, Yoshimura, & Tamakoshi 2005). However, the changing food culture of Hispanic and Latino immigrants is not the only reason there have been such staggering negative effects on the bodies of these individuals. Changes in physical activity levels and the effects of spending less time together as families in a traditionally close-knit community lead to psychosomatic diseases such as depression, stress, and anxiety, which further exacerbate the obesity problem when these individuals begin eating emotionally as a means of dealing with the unexpected pressures of living in the United States. Socioeconomic pressures negatively impact the health statuses of the Hispanic-Latino community as its members struggle to work at multiple jobs, many as single mothers, combined with raising children and providing for the needs of their families.

## **THE ANTHROPOLOGY OF FOOD**

Because food touches everything, is the foundation of every economy, a central pawn in political strategies of states and households, and marks social differences, boundaries, bonds, and contradictions, the development of research interests in food is as old as anthropology (Counihan & Van Esterik 1997: 1).

Anthropologists have long studied immigrants to the United States, and the importance of studying the relationship between food and culture is that, "Food systems are, like myth or ritual systems, codes wherein the patterns by which a culture 'sees' are embedded. Through analysis of food and eating systems one can gain information about how a culture understands some of the basic categories of its world" (Douglas, quoted in Meigs 1988: 100). Early anthropologists studied food because of its central role in many cultures, and several wrote pointed pieces on foodways (see Du Bois 1941; Firth 1934; Fortes 1936; Mead 1969, 1943; Powdermaker 1959; Richards 1932, 1939).

The majority of recent studies have been conducted on immigrant groups living in either east or west coast states, border states, and mostly within large metropolitan areas (see Donnelly & McKellin 2006; Eddy 1968; Goodkind & Foster-Fishman 2002; Mangin 1970; Osypuk, Roux, Hadley, & Kandula 2009; Silka 2007; Southall 1973). Only in current years has the focus on studies of food cultures of these new Americans shifted away



from solely covering topics such as food and memory and identity. New studies examine healthcare concerns immigrants now face after cultural adaptations to the Westernized diet, bringing about illness and diseases such as obesity, asthma, diabetes, high blood pressure, followed by a host of other life altering and threatening conditions prevalent among these minority ethnic groups (see Beebout 2006; Brettell 2000; Kasper, Gupta, Tran, Cook, & Meyers 2000; Magnusson, Hulthén, & Kjellgren 2005; Marte 2007; Salazar 2007).

The main factor pinpointed as the cause of most of the obesity problem is primarily the result of consuming more calories than people expend in a given day (Bleich, Cutler, Murray, & Adams 2008). Even social scientists in other countries are researching the obesity problem among low-income immigrant and refugee children exploring dietary patterns, physical activity and perceptions of relationships between life-style and health (Magnusson, Hulthén & Kjellgren 2005). The implication from research suggests a global movement to balance hunger and malnutrition in the developing world with increased physical activity to offset growing obesity issues in the developed sectors. Suggestions to halt this epidemic insist upon both cross-cultural participation as well as coordination within and across national boundaries.

A study of immigrant neighborhoods in four US cities provides viable data and conclusions examining the health consequences of living in neighborhoods with higher proportions of immigrants, showing that the benefits of living in an immigrant community have different associations with different health behaviors and outcomes (Osypuk, Diez Roux, Hadley, & Kandula 2009). Conclusions from this research offer the explanation that immigrant neighborhood residents' health statuses are influenced by socioeconomic status, level of acculturation, poverty and food insecurities, and quality of the neighborhood social environment.

Katarina Sussner's research concerning the influence of immigration and acculturation on the development of overweight in Latino families reveals that exposure to obesogenic environments in the US may foster development of overweight and obesity in immigrants with greater acculturation. It is clear that immigrants come to the US in better health compared to the community population around them, but the longer they live here and become acculturated to mainstream eating habits, Hispanic-Latino populations' health statuses suffer.

## **THE SITUATION IN MURFREESBORO: PRE-IMMIGRATION LIFE**

Ethnographic interviews with Hispanic immigrants living in Middle Tennessee tell fascinating stories about the daily lives consultants lived in their home countries. The interviews are divided by these immigrant women's descriptions of physical activity, nutrition and eating habits, and school lunch offerings prior to immigration. One of the most important aspects from the interviews discussing physical activity pre-immigration is that all of the women said they did a lot of walking in their home countries. Combined with domestic functions, these women describe a life of being very physically active.

Emily said of physical activity:

*In the evening we would always go out and walk [to the park or to the lake]. Usually the people they [went] walking like our family – it's just walk to go to the store, to the grocery store or something like that.*

Georgia echoed her sentiments:

*In Honduras I didn't have a car, no one had a car, we would go to the groceries, to the downtown center all walking, and that was a long distance. And we would go two to three times a week. We loved it.*

Vickie reported:

*We were always walking. We would meet in the center of the town that was called the "plaza." The custom was to walk around it, and the young men and young women would meet and see each other as they were walking around. And that was the custom for each weekend on Sunday.*

Pre-immigration nutritional habits are consistent with a diet made up of nutrient-dense fruits and vegetables combined with complex carbohydrates from grains, such as rice and breads and combined with meat. Drinks consumed tended to be *aguas frescas* (which are made by blending fresh fruit together with water, sometimes sweetening the beverage before serving), along with other fruit juices, water, milk, fruit flavored soft drinks, and Coca-Cola.

Donna described her family's eating patterns:

*Over there, during breakfasts or lunches we always eat at the table, but the last meal is typically eaten in front of the TV. The foods were...we are accustomed to eating beans, rice, meat, tortillas... [We would drink] fresh drinks... Lime juice, Tang, sometimes Coca-Cola. Sometimes, I would go [grocery shopping] every three days. Over there you wouldn't be able to buy too much food because it would spoil. For dinner it's always beans, rice, and tortillas. If my husband goes out fishing, then we will eat fried fish. I wasn't accustomed to buying any sweets really.*

Emily stated:

*We all eat together; the TV is never on; and all meals are eaten at the table. We would buy food daily: fresh fruit, fresh meat... Over there there isn't [prepackaged convenience foods]; people live according to their financial situation. I introduced fruits and vegetables in my girls' diet from a very early age. I would boil the fruits or vegetables, and liquefy them and feed them that. All the children [in Mexico] were used to eating veggies at a young age.*

Mary described her family's eating habits:

*In Mexico, we always make meat fresh from going to the market and we went to the store to buy the fresh tortillas. [We go to the market everyday for food]. We don't do [use] a lot of salt.*

Most of the women said eating fast food was too expensive or that the restaurants were far away. They did describe buying food from street vendors as opposed to buying fast food.

Donna described eating out in Mexico:

*Over there ladies in the neighborhood would go out and sell tacos. That's what we would eat [instead of fast food].*

Emily's description matched Donna's:

*Over there if you didn't have the money, you just didn't go [out to eat]. The people who ate hamburgers, it was only for people with money. It cost a lot.*

The women also described their children's pre-immigration school lunches. For the most part, mothers either made healthy lunches for their children to take with them, or the school offered nutritious choices for the children to buy.

Donna describes the Mexican school lunch offerings:

*[My children] would eat once they got there [to school]... Lunch is the only meal or food time that they get [in school]. It's 30 minute recess. It's not like here where the children need snacks. We actually didn't know what snacks were.*

Mary added:

*Every mother, they go to school to feed their kids. [I take] like fried eggs with salsa, potato with beans, fried tacos, rice... we cook a lot of rice. We cook the rice with tomatoes, sometimes white [rice] with vegetables. Over there, outside of the school, the kids can buy fruit. Like snack.*

Stories eliciting memories of eating practices both within the home and at school, combined with descriptions of a physically active lifestyle describe lives of health and wellness for Murfreesboro's Hispanic immigrants pre-immigration. If Hispanic immigrants lived healthy, physically active lifestyles prior to coming to the US, the question now becomes what changes in their daily lives have negatively affected their health outcomes post-immigration?

## POOR MOTHERS AND FOOD INSECURITIES

The post-immigration situation of these women and their families to the United States is very different. Their health habits and foods consumed here do not mirror those practiced

pre-immigration. Upon reading the research into immigrants and health, the theme of “food insecurity” kept popping up. And while this is a policy term, it aptly describes the state of being of many poor people, immigrants and non-immigrants alike. To understand the situation in which they find themselves, we must first explore the concept of food insecurity more thoroughly.

Food insecurity, defined as “limited or uncertain access to enough nutritious and safe food or limited or uncertain ability to acquire acceptable foods in socially acceptable ways” is prevalent among many low-income families (Bickel, Nord, Price, Hamilton, & Cook 2000). In 2002, about 11 percent of American households were classified as food insecure (Wilde & Nord 2005), but the rate was higher in households with children (18%), poor families (37%), and in black (24%) and Hispanic (22%) households (Nord, Andrews & Carlson 2003). As measured by the U.S. Food Security Scale (Bickel, Nord, Price, Hamilton & Cook 2000), food security is considered a marker for the adequacy and stability of the household food supply over the past 12 months for active, healthy living for all household members (Bickel 2000).

Studies show the potential negative impact of food insecurity on children’s health and development, associated with poor child outcomes in the realms of physical health as well as psychological and academic functioning (see Alaimo, Olson & Frongillo 2001; Casey 2006; Dunifon & Kowaleski-Jones 2003; Slack & Yoo 2005; Winicki & Jemison 2003). Adverse impacts of food insecurity on young children’s health and development are important given the linkages between early childhood circumstances and later life outcomes (Case, Fertig & Paxson 2003). In particular, food insecurity may be a concern for the young low income children of immigrants, given their already elevated risk for poor health (Huang, Yu & Ledsky 2006). Within anthropological ethnographic studies, Janet Fitchen’s research and hypothesis provide examples that food and eating patterns of low-income people, despite the economic constraints of poverty, follow many dominant American cultural ideas and food practices that may actually exacerbate malnourishment (Fitchen 1986). Her research identifies several factors contributing to uneven distribution of hunger across populations within the United States, namely that population groups [including African Americans, Hispanics, Indians, households headed by women, and children], geographic regions [particularly the South], and age ranges most likely to fall below the poverty line are most at risk for being hungry and malnourished.

Jerome offers an explanation for contemporary eating habits, that even in cases of poverty, “Food preferences that lean towards finger foods, fun foods, snack foods, and fast and convenient foods express basic American cultural values” (Jerome, quoted in Fitchen 1986). Low-income people express their membership in the society and their adherence to its dominant values through many of the same food choices that characterize the rest of the population such as using food stamps or vouchers to buy heavily-advertised, status-invested foods seen on television as a means of exercising their freedom of choice in buying practices. Unfortunately, the effect of junk food on the poor is worse because while they can only afford to buy highly processed, fatty and sugary foods, more affluent people can

afford to buy both junk food and nutritious food. More importantly, Fitchen explains that the United States Department of Agriculture (USDA) supervises the food stamp program as well as the free and reduced-price school lunches and nutrition education for the poor. She claims that the poor are not the USDA's main constituents due to the fact that the interests and political power of the food industry and the agricultural sector of the economy exert such a strong influence on food assistance programs. Only the Women, Infant, and Children [WIC] program is under a federal department primarily charged with people's well-being, the Department of Health and Human Services (Fitchen 1986). Other researchers' findings reveal how government assistance programs assess immigrant groups' deservingness of welfare, the food stamp program, and healthcare depending on their country of origin and the affects this has on their incorporation into American society (see Bean, Van Hook & Glick 1997; Horton 2004). Further research establishes a definite relation between legal and illegal immigrants living below the poverty line and definite food insecurities, leading to malnutrition, particularly for children of immigrants (see Chilton 2009; Drachman 1995; Kasper, Gupta, Tran, Cook & Meyers 2000; Van Hook & Balistreri 2004).

Food insecurity has both qualitative and quantitative effects on diet. Immigrants, particularly Hispanics, experience adverse psychological effects of food insecurity (Quandt, Shoaf, Tapia, Hernández-Pelletier, Clark & Arcury 2006). Not only do they find themselves faced with the economic constraints posed by poverty, low-wage employment, job insecurity, language, education, and marginal social position, but this risk is compounded by restrictions on enrollment in government programs designed to prevent food insecurity because many lack valid immigration documents and do not seek government assistance due to fear of being deported.

With so many immigrants moving from Latin American countries into areas of the United States, particularly to the American South, there is little infrastructure in the Hispanic and Latino community to receive these new members, leading to feelings of isolation for them. Depression and stress interfere with a parent's ability to work and balance a food budget on a low monthly income. Parenting skills and knowledge of what assistance is available for those mothers who may not have legal status, as well as the length of time spent in the United States becoming acculturated also affect household level food insecurity (Kalil & Chen 2008). Language barriers of non-English speaking mothers often keep them from becoming involved at their children's schools and other organizations within the community, as well as in negotiating with the bureaucracies of government assistance programs or private charities.

Thus, low-income immigrant families, compared to their native counterparts, are at greater risk of food insecurities and have lower overall profiles on the socioeconomic and demographic factors that correlate with food insecurity. Combined, these challenges lead to a less productive and fulfilling life in the United States due to malnutrition --whether from obesity or deficient diseases—and decreased physical health statuses. This information is important to understanding how food and health are intertwined in the immigrant

experience, bringing food insecurity and poverty into consideration as factors contributing to the health crises many immigrants face after becoming acculturated to US food practices.

## THE SITUATION IN MURFREESBORO: POST-IMMIGRATION

After the first interviews during which consultants were asked to describe their lives back home, in the second interview, they were asked to describe their daily lives and eating habits in the United States. For these Hispanic immigrant families, living in Middle Tennessee does not come without a struggle. Many of the parents work multiple jobs in order to support their families, and still most live on the brink of poverty. Thus, the lived experiences of Hispanic immigrants in Murfreesboro fall in line with research on poor mothers and food insecurities.

Donna said of her family's nutritional habits post-immigration:

*We wake up and sometimes we eat cereal, or coffee with a ham and mayonnaise sandwich. Maybe a smoothie with oatmeal, bananas, milk and sugar. When I see that in the kitchen there is not much I resort to eggs... He [her son] doesn't like vegetables- he has got to start to like vegetables.*

Emily reported:

*We go one day of week [to the grocery store], so we have [food] for all week. In the morning I get up and eat a yogurt or banana. Or drink milk sometimes. Sometimes in the morning they [her daughters] eat like a yogurt, juice, but most of the times they eat at the school. They eat the lunches at school and ask for hamburgers or pizza at home. It is difficult for them to eat that which is similar to the food at home [in school]. And the girls eat cereal at night. And sometimes I just eat an apple or eat a fruit or something, cookies or something. I buy the cornflakes or cheerios and I watch them. I tell my little girl, "Don't put sugar on it," and but sometimes I put a banana in the cereal. She likes. I just trying to - that they eat something nutritious and healthy.*

Georgia commented:

*It's more difficult to be thinner now. All I eat is dry fibrous cereal and coffee [for breakfast]. I like my coffee black. So what I do is I eat the cereal [dry] and I chew it up, then I drink some coffee with it, I like this. Every once in a while, I cook the children eggs. Sometimes we do refried beans; we do eggs with chorizo, tortillas with cheese. We eat dinner at 6 PM, but they go to sleep late, all three [children]. It will be around 10 or 10:30 PM and they're wondering what to eat or drink...If something is left over like rice or meat, he goes and eats the rice and meat. Always. And if I don't make anything, perhaps I made food at 4 PM, and I think that the meal would be good for the rest of the day because I don't feel like eating anymore that day. At 3 or 4 PM we eat. Maybe we eat at 5, and I think to myself, "Ok, no more cooking today." But when I cook at 5 PM, I think it is enough for*

*the rest of the day. But, the three keep eating. Cornflakes, rice, meat, whatever they like that's left over, they eat. Except salads, they don't eat salads.*

Nutritional habits that have changed a lot are the consumption of fast foods. In their home countries, immigrant women spoke of rarely consuming fast foods because of the distance and cost involved in being able to consume the foods. Hispanic women describe an increase in consuming fast foods post-immigration.

Emily describes her family's fast food consumption post-immigration:

*[We eat fast food] probably one time [per week]. Sometimes the Chinese buffet. I like to order the grilled chicken [at fast food restaurants] but the girls like meat. They order hamburgers. I always get sweet tea or Sprite. The children drink Dr. Pepper or Coke. The youngest drinks Sprite. They [her children] always get fries.*

Georgia echoes:

*Sometimes when I can't [cook], we go [eat fast food]... McDonald's, Burger King, Mrs. Winner's, and sometimes we eat Chinese; I like Chinese. I like them all.*

Nora's family too has fast food several times a week:

*Maybe one day during the week and once on weekends [we eat out], but one weekend yes, one weekend no [they alternate weekends for eating fast food]. For me, I like the chicken sandwich. It tastes better in my mouth. They [her children] have the Whopper and fries. With Coke or Sprite or juices to drink.*

The level of physical activity among Hispanic immigrants in Middle Tennessee suffered a drastic decline after immigration. Environmental factors, such as living in unsafe neighborhoods as well as the outside temperature during much of the year in Tennessee, affect desires to engage in physical activities; and the women interviewed portray a life largely lacking physical activity compared to their stories of exercise pre-immigration.

Donna said of physical activity post-immigration:

*It is normal that they wake up, go watch television and then go outside to play. Then the heat gets to them and they come in. They're up and they're around before breakfast. Playing with toys, then outside, then they come in and want breakfast. We walk sometimes or maybe run, play with the ball. They always want me to go out there with them, but I say no most of the time.*

Emily reported:

*I get up at 6:30. I take the girls to school and then I go to the park [Greenway] to walk for forty-five minutes to an hour. I clean just a little. I mop and do the dishes. I sweep. All of the days, each cleans, the girls too. In the evenings, I try to take them [her children] to*



*the park; I don't let them go out here because it's a bad area. My husband prohibits them from going outside without someone.*

Mary said:

*They only watch TV; they don't want to help me! Every afternoon my cousin takes them outside and they play with the ball over there. But everyday they play, or I take them everyday to the ....park, for a walk, or to see things. We have to drive everywhere. There is hardly any chance for exercise here.*

Vickie said of physical activity:

*When it's not too hot they [her children] can leave the house. In the mornings, they can walk around the neighborhood or ride their bikes, and when the sun lowers later on they can [go outside].*

More important than the changing nutrition habits and physical activity levels are the worries these Hispanic immigrant mothers have about the health and well-being of themselves and their children. Many of the women voice their concerns about their children becoming obese and outgrowing their clothes, as well as the concerns about the lack of physical fitness they have seen both in themselves and in their children.

Emily voiced her concerns about health post-immigration:

*I don't know... why they are overweight. I am always worried about that. I try to get them as physically active as possible. I take them to go swimming, to the park. The three of them are overweight. In Mexico we didn't have to worry like here, but here it's one more thing that the food – the majority of children, it's difficult to cook them good food that they'll really eat. You have to cook something that they'll eat.*

Donna too had worries about her children's health:

*Lately when I go out and buy clothes for him [one of her sons], I have got to look in the larger boy sizes because all he eats is meat. We have trouble finding the right size and he gets frustrated, so I tell him that we will, because I've been a bit careless with my cholesterol too, we will start eating more vegetables and healthier. I have the [diet] plan over there, our diet will change. We don't eat until we're full. I worry about the younger one [the heaviest son] because his weight went up a lot and now he is snoring a lot as well. I think to myself, "It's going to cost me more to have him in a hospital than to help him with his diet." We don't eat the food [follow the diet recommendations] exactly, but sometimes very similar.*



Vickie's concerns are similar:

*I wanted him [her son] to eat carrots, but he doesn't like them to come with his food or lettuce, no carrots, nor anything like this. So the customs, his customs with food are not good... My husband he has become a little fat in this culture.*

The information these interviews provide is invaluable for understanding the experiences of local Hispanic immigrants. By reading their individual stories and post-immigration outcomes, the researcher has a mental picture of the nutritional habits, amount of physical activity, and the concerns and worries these immigrant mothers have about their own lives and for the lives of their children. The home environment plays a huge part in the outcomes of health statuses for immigrants, as does the school environment, a place where immigrant children are quickly becoming more acculturated to US food habits than their parents.

While these interviews provide information and life stories from only seven people, they serve as proof that the fast-growing health crisis within the immigrant community is real, especially in Middle Tennessee. As immigrants become acculturated to life and to the food habits of America, so too do their bodies begin to mirror the shapes and illnesses of other Americans.

### **Research in School Cafeterias**

Food and the eating environments in which they are consumed likely contribute to the increasing epidemic of obesity and chronic diseases over and above individual factors such as nutritional knowledge and motivation for eating healthy. In contrast to research conducted by clinical nutritionists, dieticians, and epidemiologists, anthropological research contributes a more in-depth examination of the culture of school cafeterias and of the immigrant youth within these environments.

Anthropologist Mary Story's research focuses on an ecological framework for conceptualizing the many food environments and conditions that may influence food choices, pinpointing knowledge regarding the home and school settings for low-income and immigrant groups as nutrition environments affecting health, a finding significant to this research. Her research reifies the scientifically-proven fact that diet plays an important role in the prevention of obesity and chronic diseases and that by modifying intake behaviors, Americans have the potential to fight and topple the current obesity epidemic plaguing much of the country's population (Story, Kaphingst, Robinson-O'Brien & Glanz 2007).

Focusing on the environment of educational settings, Story explains that within the home, availability and accessibility to healthy foods, the frequency of family meals, parental intake and parenting practices dealing with their children's nutrition all potentially affect the eating habits of children as they age. Yet we know that for many low-income immigrant families, parents work at all hours, therefore putting immigrant children at risk, lacking stable adult influences for developing healthy eating practices. For this reason, some of the responsibility for teaching these at-risk children the importance of making healthy food

choices as well as including adequate physical exercise in their lifestyle falls on immigrant children's schools.

Meals served in school cafeterias are required to meet federally-defined nutrition standards and the Dietary Guidelines for Americans. However, federal requirements for cafeterias do little to control standards of competitive foods sold in vending machines by outside companies or to set school-wide nutrition standards; the school environment can be a place of concern when addressing the obesity epidemic in school-aged immigrant children. Only recently has the implementation of nutrition standards in educational facilities appeared, recommending outside competitive vendors bringing snack foods into schools for student purchase only be allowed to offer fruits, vegetables, whole grain, and nonfat/low-fat dairy products.

Among educational institutions with higher proportions of low-income and immigrant/minority student populations, the federal and state governments need to step in with assistance programs to increase daily intake of fresh fruit and vegetables amongst these students. Other efforts to improve the quality of foods in schools could include farm-to-school programs, which link local farmers providing fresh locally-grown produce to school food service cafeterias and school gardening programs. There is also a need for classroom nutrition education to complement changes in the school environment to increase students' skills for adopting healthy lifestyles (258). In her conclusion, Story states that, improving dietary and lifestyle patterns and reducing obesity will require a sustained public health effort, which addresses not only individual behaviors but also the environmental context and conditions in which people live and make choices. Individual behavior change is difficult to achieve without addressing the context in which people make decisions. (266)

Conducting research within the American South, anthropologist Deborah Crooks' research in a Kentucky elementary school on the cafeteria and snack foods provided for purchase focuses on the two ways schools shape nutritional habits of children: first, children spend many hours at school per day, where they may consume up to one-third of their calories, and second, schools are the primary place where children learn about nutrition and appropriate diet through classroom teaching (Crooks 2003). The original aims of her research were to: (1) Document the growth and nutritional status of elementary school children in the community; (2) document the dietary intake and activity patterns contributing to nutritional status; and (3) gain an understanding of environmental factors that shape dietary intake. (183-184). Results from her research after assessing these children's anthropometric and dietary intake data showed that the students at this school were overweight or borderline overweight, with many of their body mass indexes (BMIs) over those of the reference group provided through the National Health and Nutrition Examination Survey (NHANES) nationally representative samples (MMWR 1997). When analyzing dietary intake, evidence supported that children consumed high-fat, high-sugar foods and rarely consumed fruits and vegetables. Children at this school in Kentucky also consumed greater amounts of total fat, saturated fat, and carbohydrates in ratio to other nutrients suggested as healthy amounts by federal dietary guidelines.

Economic status, ethnicity, and region all add to the educational environment for predicting nutritional risk for children. Cara Ebbeling identifies a number of environmental influences on diet, physical activity, and family practices in the United States that promote overweight and poor nutritional status among children and that make long-term improvement in nutritional status difficult to attain. In addition, it is proposed that underfunding of schools may lead to reductions in or elimination of physical education classes, the contracting out of food services to companies that often sell low quality fast foods, and/or the placement of vending machines in schools for the sale of soft drinks, and, as others point out (Wechsler 2001), low quality, high calorie snack foods (Ebbeling 2002).

Studying the immigrant youth population, Melissa Salazar explores the childhood memories of *Mexicano* (Mexican-origin) adults as illustrations of the importance of the school cafeteria as a complex public eating space for ethnic minority students (Salazar 2007). Her study finds that for minority Hispanic students, the lunchroom becomes not just a place to eat, but an environment where assimilative food pressures and peer relationships collide, forcing these immigrant children either to become fully acculturated to Western food practices, or to negotiate a boundary between home/ school foods. Salazar discusses that in institutional lunch programs, Hispanic and other minority youth confront both institutional and peer pressures to adopt the dominant food norms of American school lunch. She explains that it is unlikely that *Mexicano* students encounter culturally familiar foods from home within the menu offerings of American school lunch menus. As a result, “Immigrant and ethnic minority children spend a good portion of their lunchtime trying to ‘fit in’ both with their food habits and with whom they sit” (154). Her findings suggest that immigrant children acculturate to Western food habits faster than their parents or other adults.

This data on school cafeterias provides a context for understanding the stories of Hispanic immigrant school children’s experiences in Middle Tennessee and the changes they have faced in local school cafeterias. From the interviews between immigrant mothers and Drs. Fadzillah and Leggett, Nora and Donna explained that their children found eating American foods difficult when they first started consuming them because of the cultural unfamiliarity between the foods eaten at home and those served to them at school. Sometimes their children still take their lunches from home and often refuse to eat the breakfast foods served in their school cafeteria. However, after years of growing accustomed to eating such foods as hamburgers, fries, and pizza at school, the children have started asking for these items at home as well, which concerns their mothers who do the shopping and prefer to make healthier buying choices for their children. Instead of snacks of fresh fruits or vegetables, the children prefer sweet items for snacks, such as cookies or candy as well as soft drinks or artificially flavored fruit juices.

This provides clues to the changing food habits of Hispanic immigrants coming in large part from their children becoming acculturated to American foods faster than their parents. What is important to note for the overall research is that public school cafeterias play a huge part in the changing health statuses of immigrant children, who then take the

newly-acquired eating habits home to influence eating habits of the rest of their families. This provides an interesting question about the changing health statuses of immigrant children and natives alike: would we see a halt and possible turn-around in the obesity epidemic impacting not only immigrant populations but all of America's youth by changing nutritional policy in school cafeterias?

## **CONCLUSIONS AND SUGGESTIONS FOR FURTHER RESEARCH**

New immigrants from such regions of the world as Central, Latin and South Americas, Southeast and East Asia, Africa and the Middle East come every year to build better lives for their families due to our thriving job market within Middle Tennessee. How much of their income people can assign to food—and indeed, how much time they can give to preparing and even eating it—is a vital factor in the persistence of tradition and the shaping of change. When such change has the effect of revolutionizing both food production and the circumstances of its preparation and consumption that means its lived impact falls squarely upon existing patterns of eating (Mintz 2007).

This research provides a detailed study of food in anthropology, important to providing an in-depth look at the omnipresent role food plays in culture. By examining previous literature combined with an examination of raw data provided through recent research conducted by Drs. Ida Fadzillah and William Leggett in 2009, the researcher was able to answer her research questions: how are Latino and Hispanic immigrant populations' nutritional statuses affected by acculturation to the United States and to Middle Tennessee, and what factors come in to play in changing their own cultural food practices? Changes in food availability and preferences, food insecurities, school lunch offerings, time spent engaged in physical activity, the lack of strong immigrant community solidarity, hectic daily schedules, lack of information about aid programs offered to low-income families, and becoming accustomed to life in the US have profound effects on Hispanic immigrants lives and bodies.

A compelling study of Korean immigrants found that the longer this group stays in the US, the more diet-related diseases such as cancer, hypertension and coronary heart disease, digestive diseases, arthritis, and diabetes occur among individuals in this population (Yang, Chung, Kim, Bianchi & Song 2007). Another study set up bilingual nutrition classes with interpreters to increase the health statuses of immigrant Vietnamese women who qualified and received WIC benefits (Ikeda, Pham, Nguyen & Mitchell 2002). These studies on Korean and Vietnamese immigrant groups' health outcomes suggest that studying the effects of acculturation on Hispanic-Latino immigrant lives is not a novel idea; anthropological research on food and culture provides the complex details of this health crisis that statistical studies often lack. Further research examining other ethnic immigrant groups on the subject of nutrition and health would bring valuable cross-cultural understanding to the experiences of other ethnic groups moving into the US, as well as to Middle Tennessee, perhaps providing answers to the changes seen within minority groups. The immigrant experience is not the same for every group or even for each

individual; indeed, this researcher hypothesizes that health outcomes of other immigrants differ according to their experiences of acculturation.

The popularity of studying health and nutrition has not abated, but has become an even more popular topic on the forefront of research within all disciplines, especially in the social sciences. Particularly within the university academic setting, research grants funded through the Tennessee Board of Regents [TBR] related to nutrition and health in three of the five research projects funded in 2009 alone. This fact shows that scholars from all disciplines are taking notice of the growing health crisis and do not just want to exploit immigrant groups for their research, but want to provide advocacy and change to benefit these people for being willing to step forward with their stories of health and wellness alteration. Research in this area will only continue to grow as the obesity epidemic does, until researchers along with other concerned citizens become committed enough to intervene on behalf of not only the immigrant community, but for native Middle Tennesseans as well, challenging the local, state, and federal governments to make the necessary amendments in nutrition policy to arrest the current health crisis apparent not just in the South but across the entire US.

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## Comparisons of Accuracy of Nutrition Knowledge of College Students With and Without Risk Factors for Type II Diabetes

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### **Abstract**

*Type II diabetes is a major health problem in the United States. Untreated type II diabetes may lead to cardiovascular disease, nephropathy, neuropathy, degenerative eye health, blindness, or other catastrophic complications including death. Awareness, prevention, and intervention based programs for those at-risk for type II diabetes, those currently diagnosed, and the general public are essential to lowering the incidence of type II diabetes in the United States. This study was developed to measure accuracy of nutrition knowledge of college students without known risk factors compared to those with risk factors for type II diabetes. No significant differences were found in accuracy of nutrition knowledge between students with risk factors and those with no risk factors for type II diabetes. The findings of this study are of importance in providing awareness of nutrition knowledge deficit for college students at-risk for type II diabetes.*

Diabetes is an increasing problem in the United States and affects an estimated 23.6 million Americans (1). Medical costs, health-care interventions, and incidences of morbidity related to diabetes are costly in terms of both economics and lives damaged by this chronic disease. Nutrition knowledge of the general public, including the current generation of college students, must include accurate information in relation to type II diabetes prevention through nutrition, as well as other lifestyle changes. Evidenced-based information focused on prevention of this chronic disease is slowly being disseminated in society through education in businesses, schools, and healthcare facilities. News headlines have highlighted large corporations like insurance giant Geico, software magnate Microsoft, and smaller companies that have taken steps toward wellness initiatives and incentives. Programs such as implementing community nutrition groups and health workshops have been started through partnerships on local, state, and international levels.

It has become increasingly evident that the accuracy of nutrition knowledge as related to chronic diseases and obesity has been inadequate, as evidenced in nutrient deficient dietary habits and prevalence of chronic disease. In the United States obesity rates have increased drastically over the past 2 decades (2, 3); 64% of adults aged  $\geq 20$  years old were classified as overweight and 30% were classified as obese from 1999-2000. Meta-analysis for 68,556 US adults in the National Health Interview Survey by the Centers for Disease Control and Prevention showed that the highest obesity rates were linked with the lowest incomes and educational levels (4). Decreased morbidity and mortality may be attainable when positive nutrition and healthy lifestyle habits are used throughout the lifespan (5, 6). This study was designed to assess accuracy of nutrition knowledge in college students who, as young adults, are in charge of their dietary intake.

Type II diabetes may develop as result of genetic predispositions, and can also be attributed to excess weight, dietary habits, other behavioral and environmental factors; Type II diabetes can be present at any age (7, 8, 9). There is no cure for diabetes, however lifestyle management has been found to ameliorate this disease. Treatment and prevention of Type II diabetes requires self-management of diet and exercise and controlled glucose levels. According to a diabetes prevention trial, diet and lifestyle changes can both prevent and treat Type II diabetes more successfully than prescription medication or prophylactic drug therapy (such as metformin) (10).

Measures of nutrition knowledge level and areas to intervene in terms of prevention in college students have not been extensively studied. A review of the literature reveals that relationships among 1) knowledge of risk, 2) knowledge of preventative behaviors, and 3) implementation of appropriate dietary and exercise behavior modifications have yet to be studied in college students in the United States who are at risk for type II diabetes. Prevention and intervention programs among Canadian adults and school-age children have been found to prevent and treat the onset of type II diabetes (11, 12, 13, and 14). In the United States we have not measured the accuracy of nutrition knowledge among college students. It is the intention that this study can serve as an indication of possible

deficits of nutrition knowledge and reveal areas of opportunity for prevention and control onset of type II diabetes in college students and other young adults.

The purpose of this study was to establish if there was a difference in accuracy of nutrition knowledge between college students with risk factors for type II diabetes compared to those who did not report risk factors. The study was developed subsequent to a pilot study which analyzed food choices and exercise patterns of those with risk factors compared to those without risk factors. The two populations did not differ in diet, exercise, or lifestyle (15). Consistent with those findings, it is hypothesized that accuracy of nutrition knowledge will not differ across groups. The following null hypotheses will be tested.

### *Hypotheses*

- 1) Accuracy of nutrition related knowledge will not differ between participants at-risk for type II diabetes compared to those not at-risk.
- 2) Nutrition knowledge related to diabetes will not differ between participants at-risk and to those not at-risk.
- 3) Accuracy of nutrition knowledge will not differ when self-rating diet as “healthy” or unhealthy” between groups.
- 4) Ratings of healthy nutritional intake of those at-risk versus those not at-risk will not differ.

## **METHOD**

### *Participants*

Participants for this study included 58 college students from a southern state university. Students were recruited from upper division psychology summer classes. Consent was obtained from all participants prior to inclusion in the study. Students were given the paper survey in the classroom in one session, answered with pen or pencil.

### *Instrument*

The survey instrument was composed of 29 multiple choice or true/false questions. The survey tool was compiled into four sections. Nutrition questions included in the survey were selected from among basic nutrition facts consumers should know. See Appendix C for the complete survey instrument. The survey was divided into four sections, descriptions of which follow.

Section 1 consisted of three questions asking participants to rate their knowledge of general nutrition information. A Likert scale from 1-5 was used with 1-strongly agree, 2-somewhat agree 3-unsure 4-somewhat disagree 5-strongly agree.

Section 2 contained thirteen items that required identification of specific foods, serving sizes, and interpretation of a nutrition facts label.

Section 3 contained seven multiple choice questions related to serving size, portions, function of insulin, and consequences of diabetes.

Section 4 consisted of six questions asking participants to identify their risk factors for type II diabetes and healthiness of their diet.

Questions were selected based on expectations of nutrition knowledge appropriate to this age group and were not intended to be a formal scale. The questions were tailored to be reflective of visual cues in our daily environment. Proper portion sizes were cited from common sources as well as the familiar website, WebMD. See Appendix D.

## RESULTS

Fifty-eight participants completed the survey instrument and were evaluated on accuracy of nutrition knowledge related to risk factors for type II diabetes. Analyses were performed using Predictive Analytics Software (PASW). Independent samples t-tests were completed for hypotheses. Correlations for selected variables were completed to determine Pearson product-moment correlations. See Table 2 for correlation matrix.

Hypothesis 1 stated that accuracy of nutrition knowledge would not differ between participants at-risk for type II diabetes compared to those not at-risk. An independent samples t-test determined no difference between groups. Hypothesis 1 was supported.

Hypothesis 2 stated that nutrition knowledge related to diabetes would not differ between participants at-risk and those not at-risk. An independent samples t-test determined no difference between groups. Hypothesis 2 was supported.

Hypothesis 3 stated that accuracy of nutrition knowledge when self-rating diet as “healthy” or unhealthy” would not differ between groups. An independent samples t-test determined no difference between groups. Hypothesis 3 was supported.

Hypothesis 4 stated there would be no difference in self-ratings of nutritional intake between students at-risk and students not at-risk. An independent samples t-test determined no difference between groups. Hypothesis 4 was supported.

Twenty questions related to nutrition, health, or diabetes were asked. Thirty-six participants were categorized as at-risk with an average mean score of ~77% correct (Std. Deviation .36), and twenty-two participants not at-risk had an average mean score of ~78% correct (Std. Deviation .21). Those participants at-risk for type II diabetes scored a total average of 1% less for correct scores compared to those not at-risk. The research also indicated that the participants who self-rated themselves as highly knowledgeable in nutrition did not show a significant difference in having more correct answers than those who self-rated as less knowledgeable. See Table 2. (Refer to Appendix F for data)

Table 1. Percentage of correct answers

Correct Answers	At Risk	Not At-risk
40%	0	1
60%	1	1
65%	6	0
70%	5	1
75%	7	7
80%	8	5
85%	4	5
90%	4	0
95%	1	2

Correlations for selected variables were run to determine Pearson product-moment correlations, providing insight into relationships among these variables.

Table 2. Intercorrelations among general nutrition knowledge and self-identified risk-factors

Variables	1	2	3	4	5	6	7	8	9
1. X1	-	.36**	.64**	.29*	.06	.10	-.22	-.17	-.18
2. X2	-	-	.35**	.02	-.06	-.10	.06	.04	.17
3. X3	-	-	-	.22	-.02	-.06	-.01	.05	.07
4. X4	-	-	-	-	.40**	.48**	-.78**	.50**	-.51**
5. X5	-	-	-	-	-	.45**	-.68**	.64**	-.58**
6. X6	-	-	-	-	-	-	-.71**	.47**	-.83**
7. X7	-	-	-	-	-	-	-	-.80**	.69**
8. X8	-	-	-	-	-	-	-	-	.58**
9. X9	-	-	-	-	-	-	-	-	-

Key: \*\*significant at the 0.01 level

\*significant at the 0.05 level

Variables #1-3 represent questions 1-3 in Section 1,

1 = Self-rating on education level for risk factors for type II diabetes

2 = Self-rating on ability to differentiate between type I and type II diabetes

3 = Self-rating on knowing methods to deter development of type II diabetes

Variables # 4- 9 represent Section 4

4 = Self-identified risk factor(s) for type II diabetes

5 = Self-rated overweight/obese risk factor

6 = Self-identified diet as risk factor

7 = Total number of risk factors

8 = Self-identified if there was more than one risk factor

9 = Self-identified if diet was healthy/unhealthy

The correlation matrix presents a picture of lack of interrelationships among variables determining *being at risk for Type II diabetes* and presentation of self as having been educated on diabetes-related information. Those who self-identified as at risk for Type II diabetes did not endorse items that indicated they had been educated on information basic to an understanding of diabetes. Perhaps most importantly, they did not endorse the item, knowledge of prevention methods to deter development of Type II diabetes. According to the results of this study, crucial knowledge about diabetes and nutrition is lacking in participants who would benefit most from that information.

## DISCUSSION

The findings of this study indicate that basic nutrition knowledge, serving sizes, and general information related to type II diabetes are not clearly understood by college students whether at-risk or not at-risk for type II diabetes. Several explanations could be proposed to account for this lack of knowledge including media bombardment, socioeconomic environment, education level of parents or guardians, and lack of exposure to a nutritional health curriculum. The causes of the low levels of nutrition knowledge are of less significance than the corrections and implementation of knowledge that can lead to healthy behavior and lifestyle changes. Diet has an important role in preventing diseases, influencing healthy behavior, and enhancing the quality of one's life. The previous pilot study and this study function as opportunities to influence change in areas that may have negative impacts on health, and create an area of continued research. See Appendix E for "cause and effect" model.

### Limitations of the study and future research

Limitations include the small number of students included in the study sample. Participants in this study were upper division psychology students. Subsequent studies could include students in health science, nutrition, and nursing, disciplines that include the study of nutrition.

The scope of focus in this study was limited to a small number of nutrition issues (i.e., serving sizes, etc). Subsequent research could expand the numbers of nutrition issues that are surveyed. A greater number of items pertaining to prevention of and living with Type II diabetes could be included in subsequent studies.

The study could be strengthened by use of a Dietary Log to provide information to supplement survey data. Participants may have been asked to do a 24-hour dietary recall or 3-day diet log in order to supplement the survey results and confirm the answers chosen on the survey. These changes may have provided more detailed results.

Items the survey instrument did not address may be included in subsequent studies that focus on risk factors not being addressed in the popular media or public school education with respect to Type II diabetes. It is recommended that further research be conducted with larger samples across regional college campuses to understand how changes can be made to health education curriculum, prevention, or intervention classes relevant to type II diabetes on campus or in the community at large.

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## **The Evolution of Industrial Food Production: McDonaldization and Population Health**

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### **Abstract**

*This paper is an examination of modern food production and its consequences, and of how food production on a mass scale negatively affects health in the United States. The link between food and health at first seems obvious and simple, but the food industry itself affects our health in significant ways. What exists now is a food industrial complex, which focuses on efficiency, high volume production, and profitability. Many citizens, students, and policymakers are simply unaware of the inner workings of the food-industrial complex, along with the dangers inherent in factory farms and other sites of production within this economic sector. We employ Ritzer's theory of McDonaldization to analyze these processes. Emerging from Weber's classic sociological work on rationality and bureaucracy, McDonaldization focuses on themes of profitability, efficiency, calculability, and control. We first introduce the food industrial complex and then discuss the latent and manifest effects of McDonaldization on institutions and industries like agriculture. Finally, we explore the many ways that the food-industrial complex is affecting our health at the population and individual levels. This paper takes a critical look at how food production is affecting health across the United States. We also discuss other major consequences of these processes.*

## INTRODUCTION

The link between food and health at first seems obvious and simple: eat healthy and you will be healthy. But this connection is far more complex, as it is more than just counting calories and carbohydrates, more than eating less and exercising regularly. There exists a whole world outside of the grocery store that is involved in the production of the foods we eat, and the origins of our everyday food products are a major influence on our overall health and well-being. This is the industry of food production – an industry that directly or indirectly affects our health in very significant ways. Over the past two centuries, agriculture and food production in the United States have undergone a number of significant changes. Today, multi-million dollar, large-scale farms, produce and profit more than small-scale farms despite the higher numbers of small-scale farms. (Hoppe & Banker 2010) As well, these large-scale farms show a trend of increasing in size while small-scale farms are growing smaller. Small-scale farms outnumber the large-scale ones yet generate substantially less revenue. For example, “[i]n 2002, 90% of the product (agricultural products) was produced on 15% of the farms. (Ahearn, Korb, & Banker, 2005 (parentheses added)) The 2007 Census of Agriculture shows that small-scale farms (farms with \$250, 000 or less in sales) count for 91% of all farms; this number even increased 1% from 2002 to 2007. Yet, the increase was only for small-scale farms with sales less than \$10, 000 while the number of farms with sales more than \$10, 000 decreased. (2007 Census of Agriculture) However, trends toward large-scale production and corporatization have come to dominate virtually all spheres of social and economic life during this period as well, from health care to corrections to education, and now, also to food production. What now exists is a food-industrial complex, where fewer and fewer farms are independently and/or family-owned but are instead built around the concept of mass production – like the manufacture of cars or computer chips.

In this paper we take a critical look at these processes, and examine the many ways that this mode of food production is harmful to consumers, animals, the environment, and perhaps most importantly, human health. In doing so, we employ the important concept of McDonaldization to analyze the industrial production of food in the United States. Briefly, McDonaldization examines the trend of social structures and institutions adopting the business practices of the fast-food restaurant. (see section titled McDonaldization and Rationalization) Many citizens, students, and policymakers are simply unaware (or misinformed) of the inner workings of the food-industrial complex, along with the dangers inherent in factory farms and other sites of production within this economic sector. So the objectives of this analysis are fourfold. First we must define and deconstruct the food-industrial complex. After exploring these ideas more thoroughly, we will then apply the concept of McDonaldization to better understand the contemporary production of food in the United States. Third, we will also discuss the latent and manifest effects (see Merton, 1949) of McDonaldization on institutions and industries like agriculture. Finally, our discussion will explore the many ways that the food-industrial complex is affecting our health at the population and individual levels.

## THE FOOD-INDUSTRIAL COMPLEX

The Food-Industrial Complex is a critical component of modern agriculture, and is essentially a complex, cooperative agreement among farmers, private industry, and government, which ensures the uninterrupted flow of materials, equipment, and supplies through the food economy. This complex refers to everything involved in the production of food and food products. To better understand these processes, we examine two similar industrial complexes: the medical industrial complex and the military industrial complex. In each instance we can observe symbiotic relationships built around the production of goods, the industries that use these goods, the government that regulates these economic sectors and processes, and finally, the citizens involved in consuming these goods.

Bruce Brunton (1991) discusses the American military industrial complex and how it developed into what it is today. Many trace the military-industrial complex to President Eisenhower's famous farewell speech where he warned Americans to "guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex" ([www.eisenhowermemorial.org](http://www.eisenhowermemorial.org)). However, this term likely originates earlier, specifically in the work of classical sociologist C. Wright Mills and *The Power Elite* (1956). In this work Mills discusses the importance of military power in a capitalist society. Through this military power, "corporate chieftains" become the power elite and advance their positions. In other words, power is held by the corporations and industries that supply the military with equipment, armaments, and technology, and these companies thrive and grow as the military does. As Mills (1956:4) writes, the power elite "are in the positions to make decisions having major consequences." This conception remains more important when considering who has the power at the local, state, national, and global levels.

Brunton (1991) also discusses the set of institutions necessary in order to promote the military-industrial complex. Institutions are described as "habitual patterns of behavior or ways of thinking" (p. 43) and there are five specific institutions that, together, define this massive complex. First, there is reliance upon private contractors for military procurement; The Boeing Company, Lockheed Martin, and Halliburton Corporation are all examples of private industry. Secondly, there exists a revolving door among top personnel from these private firms and key interest groups and positions of economic power. Third, there exist defense pressure groups that perpetuate the demands for both the complex and its associated preparedness ethos. Next, there is the preparedness ethos itself, which involves the idea that even during times of peace, the military must be constantly ready and well-equipped for war. Finally, state support of strategic industry refers to instances where government contracts with private corporations maintain a defense production base, where military production remains in operation.

Medicine also lends itself well to this type of analysis. In the average doctor's office one can find a number of supplies that originate in the medical industrial complex. Tongue depressors, gloves, soap, clip boards, tiny plastic cups for medicine, even the paper smock you are forced to wear are all products of the connection between industry and medical practice, but the connection is more deeply rooted than this. On the one hand, this complex

is helping advance medical technology, as it requires and demands new products to be produced and developed. Our health care system depends upon technological advancement as well as the products, materials, and equipment that come along with it. On the other hand, we must see that the medical world itself is an industry, and this industry's goal is to produce healthy or well individuals with profitability and output at the forefront. Grace Budrys (2005) succinctly discusses the medical-industrial complex and more specifically how doctors, though they may seem to hold much of the power, are actually as powerless as patients themselves. The medical-industrial complex promotes and requires a steady influx of new products and technologies. These products vary in their overall usefulness, but the promotion and demand of equipment and supplies means that interest groups within the medical-industrial complex can maintain their powerful hold over the medical world and continue or increase their profits. So it may be easy to imagine only physicians collecting profit from surgeries and other medical procedures, putting the doctors in the place of power and the patient in a disadvantaged, subservient position. But doctors are in many ways involved in this complex in the same sense we, the consumers (or patients) are—at the whim of the industry. In this situation the manufacturer of the tools, equipment and supplies are concerned primarily with profit motives, while the health of the consumer, or patient, is relegated to a secondary role.

Similarly, the military industrial complex operates with the same goal-oriented outcome. For the industries that create the machinery, weaponry, and ammunition, war is a good thing, leading to more profit. The connection between the military and industry is now characterized by corporations striving for the next large contract with the military and government. In the United States (where defense budgets dwarf most other government spending: For 2012 The Department of Defense requests a total of 670.9 billion dollars (United States Department of Defense Fiscal Year 2012 Budget request Overview), investing in the military, and becoming an integral part of this complex, is good for business. So in both the military and medical industrial complexes we can easily discern many connections between and among government, business, and industry, all engaged in systematic processes of production and profit in their respective economic sectors. The same patterns and relationships exist in the Food-Industrial Complex. For this complex, industry manufactures the machines to harvest our crops, equipment to process the meat, packaging for goods, and chemicals for fertilizer and pesticides. Companies like Monsanto and Conagra (and countless others) maintain power through the production of these goods and maintenance of this complex. We can apply the example of the medical industrial complex here. The major interests of the Food-Industrial Complex must maintain economic control over the production of food, so companies strive to keep prices of meat low, vegetables year round, and costs cheap. This enables the consumer to buy large quantities of foods at any time, across regions, and in each store find the same or similar selection of goods. For the consumer it can seem as if these choices are undoubtedly the best and offer a wide range of products and choices, but as will be discussed below, these choices do not come without hidden consequences.

## **THE TRANSFORMATION OF AGRICULTURE AND AGRIBUSINESS**

Agriculture has historically been at the forefront of civilization and society. Societies advanced from hunter-gatherer means of food procurement to low-level food production (Smith, 2001) to eventually what we have today with modern agriculture. Research points to two factors involved in the adoption of agriculture in early societies. These are termed external and internal pressures (Bettinger, Richerson, & Boyd, 2009). External pressures refer to factors like climate change that led to the adoption of agriculture to produce sustainable crops, while internal pressures involve social pressures like increasing population sizes. A hunter-gatherer society expends a lot of energy and time for a minimal yield of food, while agriculture provides sustainable food sources over an extended period of time. Many have theorized about the adoption or transition of agricultural systems (e.g., Bettinger, Richerson, & Boyd 2009; Bruno 2009; Cohen 2009; Smith 2001) and it is easy to see that these systems are a necessary part of social life. In the United States agricultural systems have changed in many ways over the past two hundred years, and many of these transitions have taken place more recently: adoption of monoculture farming, genetically modified farming (organism), seed patenting, and the greater use and dependence of machines (for transportation, harvesting, refining, etc.).

Farming is just one part of the agriculture system and Food-Industrial Complex, as we explored in the previous section, but farming is significant in many other parts of modern society as well. For example, organized farming allows for the production of goods from the local to the regional to global levels. Some have even recognized that the farm and farmers represent a significant ideological role in a society, pointing to the media attention from films, farm aid events, and protests over the preservation of the family farm (Lobao & Meyer, 2001). At the same time we can see that farming has its consequences as well: pollution, environmental degradation, natural resource depletion, animal harm, and most importantly, human harm. These problems emerged with the more recent transformation of agriculture and agribusiness.

Over the past hundred years agriculture in the United States has changed dramatically. Large-scale and nonfamily farms account make up only 12% of total farms in the U.S. yet are responsible for 84% of production and profit. As well, these multi-million dollar farms that are outnumbered by small-scale and non-family owned farms still produce 53% of high-value crops (crops such as hog, beef, poultry, and dairy) (Hoppe & Banker, 2010). This transformation of farming is one of the most dramatic transitions in American society over the past century. In the early 1900s, more than one out of every three Americans lived on farms. But by the end of the century, the farm population was at a staggering two percent of the overall population. Further, among those still in farming, nearly ninety percent of household income came from sources other than farming (Lobao & Meyer, 2001). Essentially, the overall number of farms decreased while the amount of farmland has grown exponentially (Knight, 2006), so what we have today is the loss of the American family farm, part of the American dream, and the adoption of a McDonaldised agricultural system. Lobao and Meyer (2001) critically discuss these transformations and point to a

need for further research. For example, it is important to look at the transition of agriculture to identify the negative impact that the modern system has on the environment, animals, and humans, but also to contribute to sociological analysis and research on this topic. To better illustrate the negative effects of a McDonaldized farming and agriculture system, we specifically explore two examples where production on a mass scale have taken over and affected our lives and health: cornification and animal production.

Cornification is centered on one crop—corn—and its multiple uses as a food, but also as feed and even as a fuel source. According to the work of Michael Pollan (2002a), many of the problems associated with cornification originate in the system that produces the corn but also in the high intake of corn or corn products. Our agriculture and farming system is surrounded by and dependent on corn and corn byproducts. On one hand we ingest high amounts of corn in its many altered states (e.g., high-fructose corn syrup, corn syrup, and crystalline fructose are commonly used *natural* sweeteners used in many products). The Corn Refiners of America initiated an entire public relations campaign to combat people's concerns about the high intake of corn sweeteners and are stubborn in repeating that these products meet the U.S. Food and Drug Administration's (FDA) qualifications as a natural product (Corn Sweeteners are Natural).

The problem is much greater than the foods that directly contain corn. Another side of the issue is the use of corn as feed for virtually all animals, even grazing animals which should not consume corn in such high quantities (Pollan, 2002a). Corn was at the forefront of American agricultural systems far before the claiming and colonization of these lands, and it's fairly cheap and easy to grow. Yet, we arguably grow too much corn and with no end in sight. The government subsidizes corn by the bushel and promotes monoculture farming of corn, where the same crop is grown on the same lands year after year. Corn is at the point where we're changing the crop itself, not only into sweeteners, but also into fuels, plastics, and even vitamin C (Pollan, 2002a). Through genetics and lab testing, we find that corn is a good product that can do many things, but corn is overly used and produced. On one side we as a society are able to make new products that could solve some problems (e.g., corn as fuel or plastic) but at the same time, the reason we have so much corn is because we are growing it exponentially by the bushel. Corn is very much involved in the world of agriculture, as a food source (both meat and non-meat products) and as the fuel used by the trucks and agriculture equipment. In short, our food system is cornified.

The production of animals on a mass scale is another significant part of the agricultural system and the food-industrial complex. While a complete discussion of animal production is beyond the scope of this paper, it is nonetheless important to look at how the majority of our meat is produced, how it affects the environment and finally, how it affects our health. Meat production has doubled over the past fifty years yet is available to only those who can afford it (Horrigan, Lawrence, & Walker, 2002). With more and more meat production, we can conclude that people are consuming it at higher rates as well. To keep up with demand, animal farmers have developed and implemented new methods of raising, fattening, and slaughtering animals to maintain supply. In the United States, ten billion animals per year



are slaughtered, including chickens, pigs, and cows. As a nation we are fixated on eating meat and have normalized high meat consumption. About eight ounces of meat per day is the average for an American carnivore, which is close to twice the global average (Bittman, 2008). So just how do we feed so many people so much meat?

In the article, "Power Steer," Michael Pollan (2002b) follows his newly purchased veal cow from the farm at which it was born to the feeding lot and finally to the slaughter house. The entire process is summed up and Pollan narrates the journey of the veal cow itself, but also describes the farmers and factories involved. The food industry is able to produce such high quantities of meat within such a short periods of time because of feed and hormones. Prior to the implementation of modern production methods, an average cow would be four to five years old before it was slaughtered. With industrial feeding operations, this time is down to fourteen to sixteen months, mostly due to feeding these animals high amounts of corn, proteins (through various supplements), and injecting them with growth hormones (Pollan, 2002b). These feeding operations, known as CAFOs (Concentrated Animal Feeding Operations) play a major role in the factory production of meat. The entire process rests on productivity and profit, thus making it difficult to concern itself with environmental or health concerns (see Horrigan, Lawrence, & Walker, 2002).

So with cornification and concentrated animal production methods we can see that food production structures are far from the idealized family farm of the American Midwest. Agriculture and farming have come a long way, but have more recently adopted industry standards and practices that put profit and production well ahead of major environmental and health concerns. There are many problems that are a result of the food system's adherence to these industry standards. These effects exist at both the population and individual levels. At the population level there are environmental effects like pollution and depletion of nutrients in the soil. At the individual level we can see the impact of these farming and agricultural practices coinciding with rates of diabetes, cancers, and heart disease to name a few. Foods are being produced quickly and in abundance yet these products are lacking the proper nutrients and can even be dangerous (only one example is the relatively recent recall on peanut butter or spinach in the United States). In addition, we must consider what foods are being produced and how this production affects our dietary and nutritional practices. Diet is extremely important, as will be discussed later, but are the foods being produced in abundance those which are the healthiest for us? The next section will introduce the important concept of McDonaldization. These ideas help us better focus in on both the intended and unintended results of a McDonaldized food system in the United States. (For more information on the impact of large-scale food production see Horrigan, Lawrence, & Walker, 2002; Osterberg, & Wallinga, 2004; Tilman, Cassman, Matson, Naylor, & Polasky, 2002; Walker, Rhubart-Berg, McKenzie, Kelling & Lawrence, 2005)

## **MCDONALDIZATION AND RATIONALIZATION**

Ritzer's (2006) formulation of of McDonaldization is an amplification and extension of classical sociologist Max Weber's work on the rationalization process and more specifically

formal rationality. The rationalization process involves four key systemic processes that maintain and promote productivity, output, control, etc. in a rationalized system. That is, a rationalized process needs to be efficient, calculable, predictable, and have control over both the people involved and the system itself (Ritzer, 2006). Weber pointed to formal rationality as the best descriptor of a Western, capitalistic society as it involves rules, regulations, and social structures. For Weber, the best example of formal rationality is the bureaucracy - a highly organized and structured system which ranks individuals in the system to promote or maintain order (Weber, [1922] 1978). The bureaucracy relates to formal rationality as the fast-food restaurant relates to McDonaldization (Ritzer, 2006). A formally rationalized system gives people little choice and only offers the best and optimum outcomes as related to the eventual goal, namely profit. Weber warned about a system becoming overly rationalized to the point that it could in turn become irrational. At this, Weber cautioned about the "iron cage" of rationality whereby everything would become rationalized so that one would be stuck in a system with no means of escape, no alternatives, other than the rationalized ones. (Weber, [1922] 1978)

McDonaldization is a modern conceptualization of Weber's theory of formal rationality and the rationalization process. It's easy for us to understand control and domination in a system when it has a recognizable symbol or face attached to it. In this case, George Ritzer is able to use one of the most widely recognized symbols across the world; the golden arches. But, this process of McDonaldization applies to other institutions as well as the fast food industry. In this paper we apply the McDonaldization process to food production and the food-industrial complex but it has been applied in other areas as well, from the drug care industry (Kemmesies, 2002) to education, (Wilkinson, 2006; Hartley, 1995) and consumer culture (Turner, 2003). The process of McDonaldization concerns domination over sectors of American and others societies and itself rests on four principles that we have already mentioned: efficiency, calculability, predictability, and control. (Ritzer, 2006) For a system to be highly McDonaldized it should follow these principles enabling, thus ensuring optimum productivity and of course, profit.

Efficiency involves getting from one point to the next in the best and most streamlined manner possible. The modern fast-food drive-thru is a good example of an efficient process. In this scenario one can move from station to station (e.g. from menu to window, to window) without leaving the comfort of a car. This applies to the workers inside the restaurant as well; each should have their own specific station or task to perform that should be organized in such a way that it is cost, labor, and time conscious. Orders at the drive-thru window are quick, including the ordering, exchange of money and reception of one's order making the entire process efficient to the point that repetition is enabled.

Coinciding with an efficient process, calculation must be made to keep up with the amount of goods that are demanded and means to provide the product. For this principle, quantity is desired over quality and achieving the greatest output within a given time period is the ultimate goal (Kemmesies, 2002). It is important for a McDonaldized system to know exactly how long a process will take (and thus can calculate and maintain its efficiency),



exactly the resources needed, the profit to be collected, and the amount of workforce, tools, supplies, etc. required. In the case of the drive-thru window, without predicting exactly what is needed to fulfill the demands, the process would cease to be efficient, fast, and profitable.

Standards of predictability also must be in place in a McDonaldized or rationalized system. This applies more to the consumer or recipient of the process than the actual process of production. In this case the actual services need to be predictable both over location, or space, but also across time. (Ritzer, 2006) The same can be applied to those within the system itself, so in the case of the drive-thru window we expect the same service from the workers as we do in the product. This process should be repeatable at different times in the day and at different locations; even the drive-thru in Europe, Dubai, or China should all meet the same standards. One should expect the same manner of goods and services at any location and at any time (the proceedings of an “iron cage” Weber warned against).

The principle of control applies to humans but emphasizes non-human technology and control over the industry or sector of society itself. Control is necessary to gain or maintain the other core principles (efficiency, calculability, and predictability) in both the consumer and produce side of this process. Control applies to the workers of the system requiring them to have rules, regulations, punishments, enforcement, etc. which are enforced with strict penalization. Control also relies heavily on non-human technologies to replace human workers and promote the other principles of a McDonaldized system. Non-human technology also applies to the patrons or users of this system and in turn can promote efficiency and calculability. In the example of the fast-food drive-thru, we don't see people driving backwards, skipping lines, or walking up to the windows (for the most part) and this is due to the control through standards and norms of the drive-thru that are in place. People order their foods through a highly technological system with the computer screen ordering systems. The employees are able to use computers to keep track of orders but also in assistance with making the foods, combining and separating orders, and delivering the final product to the consumer.

## **MCDONALDIZATION EFFECTS**

The McDonaldization process is a modern standard in a post-Fordist, industrial society. Many have contributed to the writing on this topic (e.g., see specifically Ritzer, 2006) and have applied the process to other dimensions of social life (Bryman, 1999; Esmer, 2006; Hartley, 1995; Kemmesies, 2002; O'Toole, 2009; Turner, 2003; Wilkinson, 2006; and others). In this paper we apply the process of McDonaldization to the food production industry and the food-industrial complex. In this complex we can see that application of McDonaldization fits well; we have high output and a profit centered system with assembly line-like production techniques, utilization of machinery, and adherence to the four principles of rationalization discussed above (i.e., efficiency, calculability, predictability, and control). As it applies to food production we can begin to uncover both good and bad consequences to this highly rationalized or McDonaldized system. The use of highly

rationalized techniques themselves, along with effects on the environment, humans, and animals are all important to note when considering the application and consequences of these processes.

For McDonaldization and a McDonaldized system these core principles are the intended and desired results. The food industry is one sector of society that this process has been applied perfectly, with profit and production at the top of the list of priorities. As a result, efficiency and calculability can lead to higher rates of production and profit, while predictability for industry and consumers equates to higher profits through sustained and expected consumption and markets. Finally, control is maintained so that the system continues to be as productive and profitable as possible. Apply these principles to food production and we have a system that is focused on profit and production just like any other highly rationalized market or industry.

While the manifest, or intended, effects of McDonaldization have been discussed above, the latent effects of these processes are perhaps more important to consider. Indeed, the unintended consequences directly harm humans, animals, the environment, and the economy. Because our foods are produced at such a high rate, because our foods are produced quickly, and because profit is the primary goal of food production, societies around the world suffer. Monoculture farming as with corn, results in fertile soil becoming depleted of its nutrients. Farming animals the way we do causes toxic chemicals to seep into other crops, the meat itself, and eventually make their way to our dining tables. Animals are abused in the way they are raised, fattened and slaughtered. Using high volumes of oil for both the production equipment as well as the transportation equipment contributes overwhelmingly to carbon emissions. Finally, let us more specifically consider how this industry affects population health as a whole, as well as the health of individuals. .

## HEALTH IMPLICATIONS

At the broader societal level of analysis, there are many problems resulting from but also affecting the animals in animal feeding operations. As previously mentioned, Concentrated Animal Feeding Operations (or CAFO's) are large scale, confining feeding sites for meat-producing animals (e.g., cows, pigs, chickens, and even turkeys). In all stages of animal production (handling, transporting, veterinarian, meat processing, and rendering) there are increased risks of infectious diseases for the animals and workers. (Gilchrist et al., 2007) Major concerns about CAFO's include eventual resistance to frequently used antibiotics, the spread of infectious viruses, and airborne endotoxin exposure for workers and workers' families. The resistance to antibiotics within animals is linked to the use and overuse of antibiotics. Long-term, low-level antibiotic use can potentially enable bacteria to build up resistance and potentially becoming untreatable, such as methicillin-resistance *S. Aureus* (MRSA) as one prominent example. These resistance genes can pass from animals to workers and eventually co-workers and workers' families. Infectious disease can be passed from animals to workers but can also be transmitted through water and air surrounding the CAFO sites. The infectious diseases, such as Influenza, H1N1, and Salmonella tend to

be amplified in animals raised in CAFO's (Gilchrist et al., 2007). In addition, we can see great risks for workers and families exposed to dusts from CAFO's such a wide range of respiratory health effects (asthma, wheezing, and allergies) (Heedrerik et al., 2007). Animal or livestock production has also been linked to greenhouse gas emissions, specifically gases such as methane and nitrous oxide (McMichael, Powles, Butler, & Uauy, 2007).

Animal production is not the only sector of the agriculture system that is affecting the environment and entire human populations. Industrialized agriculture has been linked to a slew of hazardous effects. Horrigan, Lawrence, and Walker (2002) overview the major impacts of industrialized agriculture on our environment, ecosystem, and health. Specifics include the use of fertilizers and the increased acidity of soils that can impede plant growth, increased and consistent pesticide use that can lead to crops becoming vulnerable to pesticides and also to the decline of insect and bird populations. Also, airborne pesticides can seep into surface and ground waters and drift into other areas not treated by pesticides (Horrigan, Lawrence, & Walker, 2002). Some studies have suggested that exposure to pesticides within urban environments leads to serious neurological, and other serious effects on children. (e.g., see Ritter et al., 2006)

Industrialized agriculture is also responsible for the degradation of lands, especially the soils used for farming, and can in extreme cases result in desertification or the transforming of fertile lands into desert-like ones. Biodiversity is therefore at risk, especially with the prevalence of monoculture farming (such as with corn) and seed consolidation (the use of hybrid and patented seed varieties), but also through the use of pesticides and fertilizers (Horrigan, Lawrence, & Walker, 2002). Finally, industrialized and intense agriculture creates the highest amount of human-generated green house gases, which not only puts the environment at risk but also affects the future harvesting of foods, those foods' nutritional quality, and the health of entire populations (McMichael et al., 2007).

In the United States, health and mortality trends follow distinct epidemiological patterns. According to the Centers for Disease Control's (CDC) National Vital Statistics Reports (2007), the leading causes of death are heart disease, cancer, and strokes (diabetes is fifth, close behind respiratory disease and accidents). It's no mistake that the rates of these diseases are rising at the same time industrialized agriculture is becoming the norm. The importance of proper (i.e., healthy and safe) food should be apparent, along with its nutritional values, the types of foods, and the amount consumed. In short, food is fundamental to health (Jacobs, Linda, & Tapsell, 2007). The link between our lifestyle choices, including the foods we eat, and the leading epidemiological killers is a strong one. A diet composed of all fats and calories is not sufficient while at the same time it is important to consider the types of fats being consumed. Adams and Standridge (2006) write about these leading killers and their links to diet and nutrition. They specifically focus on the connections between heart disease, stroke, cancer, diabetes, and hypertension (both directly and indirectly) and dietary considerations. They point out that it's not just the amount of foods and nutrients being consumed, but more specifically the types of foods and nutrients being consumed: whole grains, fruits and vegetables, specific types of fish and

meats, amounts of salts, types of fats, and so on. What we can gather from their analysis is that it is important to understand our foods as well as the nutrition our foods provide and how this can affect our health. This includes understanding the inner workings of the food industrial complex.

Using the prevalence of obesity as only one example, we can link the food industry and industrialized food production to our health as individuals. Obesity and overweight is an obvious area of concern for the general public. The rates of obesity have been increasing steadily for the past thirty years. In Britain the rates have nearly tripled, while in China, the rates of preschool children in urban areas who are obese or overweight has jumped from 1.5% to 12.6% (Ogden et al., 2006). The consequent health effects are detrimental to the health care industries and economies. Conditions such as diabetes, hyperlipidemia, hypertension, coronary heart disease, and some cancers are all related to the industrial production of food. In the United States, more and more people are consuming more foods that are industrially produced (Young & Nestle, 2007). As Ludwig and Nestle (2008) point out, if the industry responsible is “[l]eft unchecked, the economic costs associated with obesity alone will affect the competitiveness of the U.S. economy.” (p. 1810)

In conclusion, there are three primary contributions in this paper. First, we define and discuss the food industrial complex as a McDonaldized structure of production. We then use Ritzer’s (2006) ideas on McDonaldization to better focus upon the intended and unintended effects of these processes. Finally, we link the McDonaldized food-industrial complex to various health and environmental issues affecting individuals and societies at multiple levels of analysis. As we have shown, there are many problems related to the food industry at large. We have argued here that the food system is a complex and McDonaldized system in which profits and production are put ahead of any negative effects. We have argued here that this system is involved is a complex but also McDonaldized one, putting production and profit ahead of any negative effects. The negative effects on the environment, animals, and humans are considerable, and should be further examined in future research. As well, effects on humans have been shown, specifically in the example of obesity which is a major problem facing youth and adolescents (Powell, Han, & Chaloupka, 2010). We as individuals but also as a society must seek solutions to these pressing social issues, and one of the first steps toward doing so involves calling serious attention to these complex problems. This paper is one of those first steps, where we hope to further emphasize the problems associated with food production in contemporary society.

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